

MASTER PLAN

FORT MCHENRY

NATIONAL MONUMENT MARYLAND



**U.S. Department of the Interior
National Park Service
1968**

THE UNIVERSITY OF CHICAGO

A
MASTER PLAN
FOR
FORT McHENRY
NATIONAL MONUMENT
AND
HISTORIC SHRINE

Recommended

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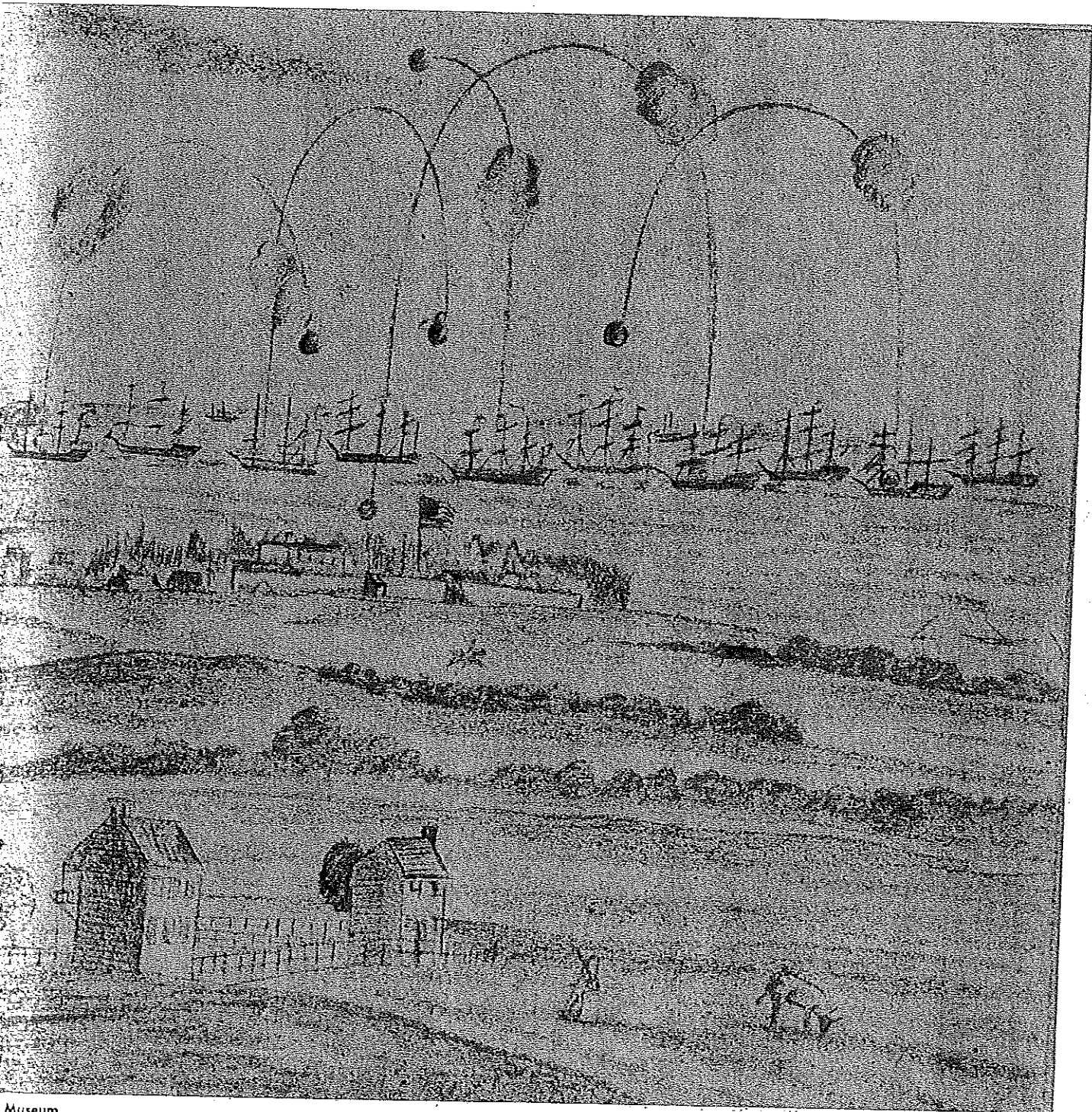
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June 1968 .



Museum

BOMBS BURST IN AIR over Fort McHenry (*flag in center*), inspiring Francis Scott Key to write poem which became national anthem. Key went on board a British ship to appeal for release of a friend who was a prisoner. British held him throughout bombardment, then let him go.

PURPOSE

To preserve, enhance, and present the site which was the key to the defense of Baltimore in the War of 1812, and thus to commemorate the men whose bravery inspired the creation of the National Anthem and gave significance to the American Flag as the symbol of a developing national unity.

Management Category: Historical Area

NOTE

The field study for the master plan for Fort McHenry National Monument and Historic Shrine was conducted from August 14 through August 18, 1967 by a team composed of the following:

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ACKNOWLEDGEMENT

Thanks to the following staff members who prepared this report:

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OBJECTIVES

1. EDUCATION SHRINE
Foster in the visitor the respect due a national shrine by stimulating him to an understanding of the complete Fort McHenry story.
2. CREATE MOOD
Remove distractions and intrusions from the Monument and encourage highest use.
3. BALANCED STORY
Reinforce the central story by establishing it in the broad framework of the Battle of Baltimore and the overall history of British operations in the greater Chesapeake area.
4. VISUAL INTERPRETATION
Restore, reconstruct and develop the Monument's historic resources to provide visible support to the Monument story.
5. MODERN FACILITIES
Provide facilities to meet the visitor's requirements for interpretation, information, and other basic services.
6. COOPERATION FOR KNOWLEDGE
Work actively, through the cooperative use of resources, with the preservation movement and academic community of the region.
7. IMPROVED ENVIRONMENT
Initiate cooperation with planning agencies, private enterprise and individuals to safeguard and improve park approaches, facilitate visitor access and enhance the Monument setting.

SUMMARY

1. This plan focuses sharply on the serious commemorative role of Fort McHenry and will guide and control all activity and development to this end.
2. Cooperation with outside agencies is essential to reinforce this role and thus gain support to carry out those activities inside and outside the Monument necessary to insure significant visitor use.
3. In research and restoration, emphasis is on the best interpretive use of historic elements as soon as possible.
4. Improvement of the Monument entrance and fee collection there will reduce inappropriate uses and simultaneously increase capacity for serious visitors.
5. Development of secondary interpretive facilities will disperse use from principal centers. Existing facilities will be expanded.
6. Additional space is proposed for offices, library, conference room and storage to replace facilities removed from historic buildings and to increase efficiency of operations. Employee housing and maintenance building expansion are needed to accommodate additional staff and equipment removed from temporary wooden utility building.
7. Acquisition of adjacent Corps of Engineers property is proposed to handle more visitors and to eliminate unsightly overflow parking area on turf.
8. Prompt action should be taken to remove distracting, obtrusive elements, whether connected with or independent of historic structures or landscape features.

SPECIAL NOTE

Proposed Constellation National Historic Site

Several bills (HR 170, 817, 886, 5886) were introduced in the House of Representatives in early 1967 providing for the berthing of the Constellation at the Corps of Engineers property adjacent to Fort McHenry as the main feature of the proposed site. Two hearings were held in April and May by the House Subcommittee on National Parks and Recreation.

The Constellation is owned by a private Baltimore group, the Star Spangled Banner Flag House Association, Inc. Under the terms of the bills the ship would be restored, maintained and exhibited by the owner. The Superintendent, Fort McHenry, would administer the site, including a visitor contact station, pier, breakwater and utilities.

Since the hearings, several Baltimore organizations have approached the Association with proposals to berth the Constellation at various alternate locations in Baltimore Harbor. The Association has revealed interest in these proposals, but has made no decision.

Because of this uncertainty, the team believed it best to develop the Fort McHenry Master Plan independent of the proposed Constellation National Historic Site.

Should the Site be authorized, operation of Fort McHenry would be affected in the following ways:

1. Maintenance

Visitors contact station, pier, breakwater, utilities (serving both Site and ship).

-2. Fee collection

The Fort McHenry Master Plan proposed fee collection at the present gate for Fort McHenry only. The Constellation owners would also collect a fee, preferably a separate one at the visitor contact station. However, this question had not been resolved at the time of the hearings and the possibility of a combined fee collected at the gate should not be discounted.

3. Parking

This plan contemplates acquisition of the entire Corps of Engineers property for parking urgently needed now for Fort McHenry visitors. However, anticipated future visitation to the Constellation would require the use of this area for Constellation visitors. Therefore, to accommodate this combined parking load it would be necessary to acquire the adjacent U.S. Navy property as well as the Corps of Engineers property. Use of the Navy property for Constellation visitors might be desirable as it would include direct access to a public street, completely separate from the existing Monument, entrance road and parking area.

REGIONAL ANALYSIS

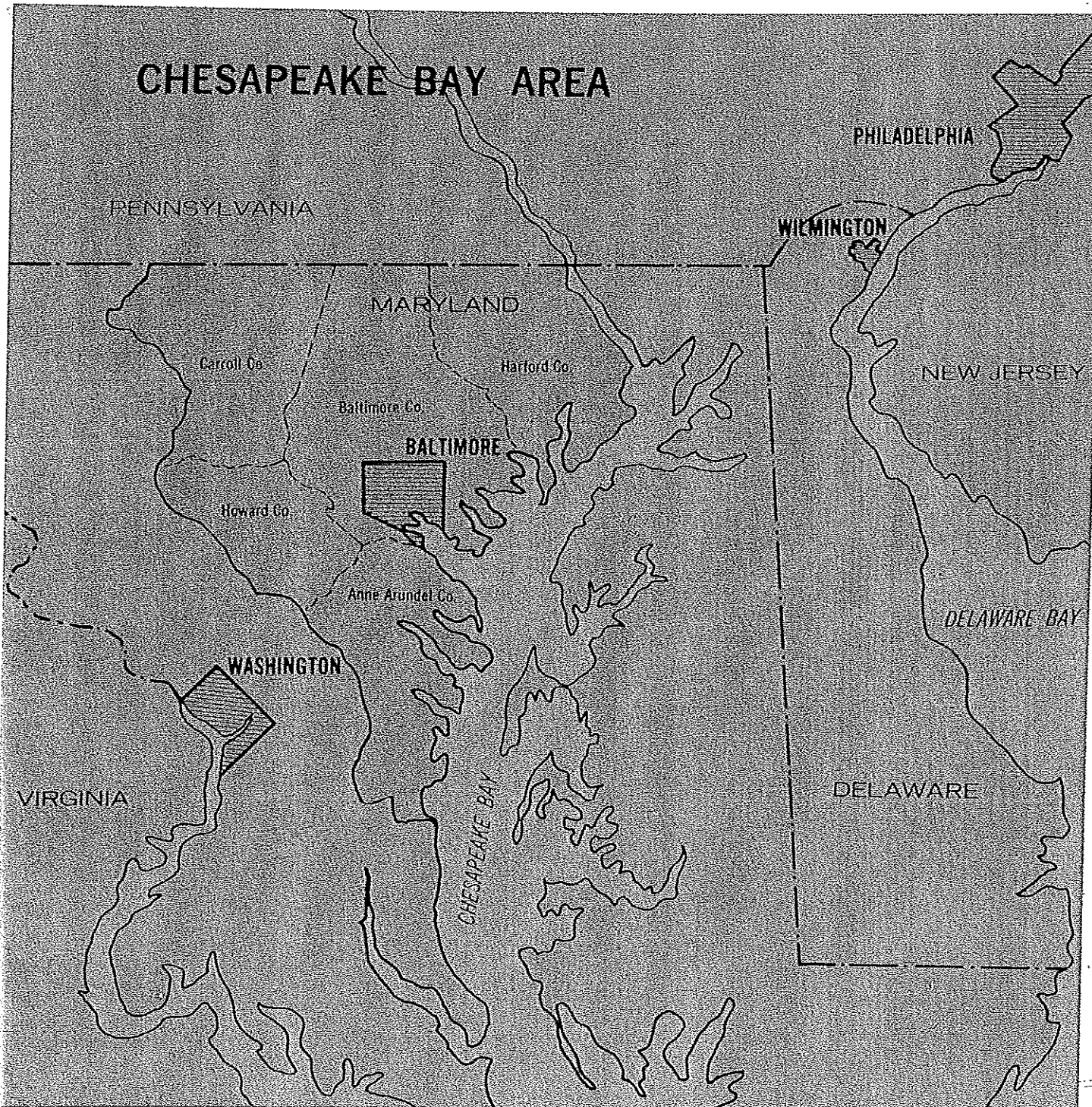
Fort McHenry represents an oasis in the midst of an industrial complex. Its location is somewhat difficult to reach because of the necessity of traversing inner city streets.

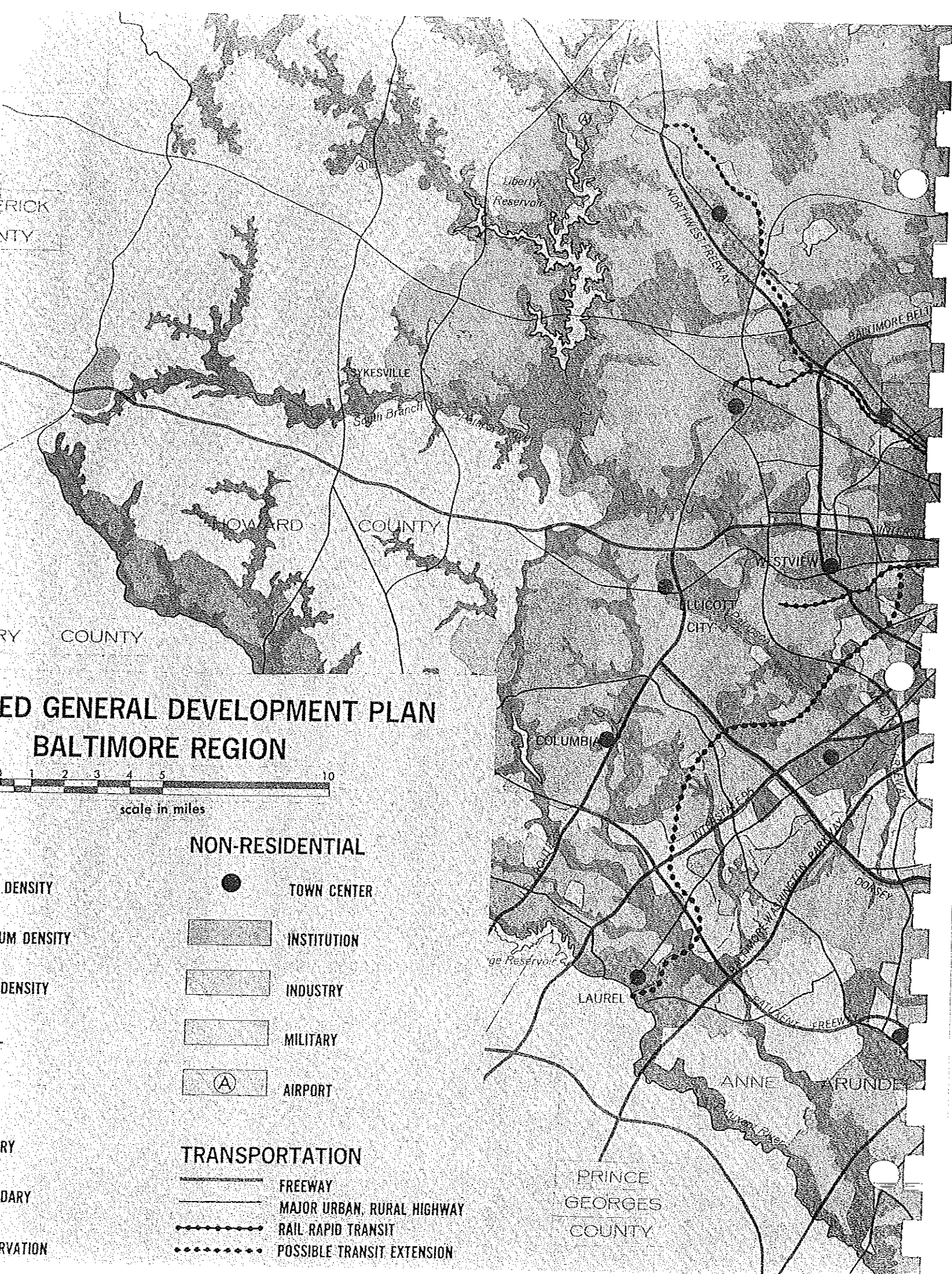
Despite these difficulties, Fort McHenry represents a "name" attraction in that every American has heard of it. As the city's transportation system is expanded and refined, the problem of access may be alleviated, thus making the area more accessible to the visiting public.

The region adjacent to Fort McHenry, while not the most attractive, is in stable ownership and possesses such costly improvements that no additional adverse developments are foreseen. The bordering tracts already under Federal ownership would make a welcome addition to the National Monument and Historic Shrine.



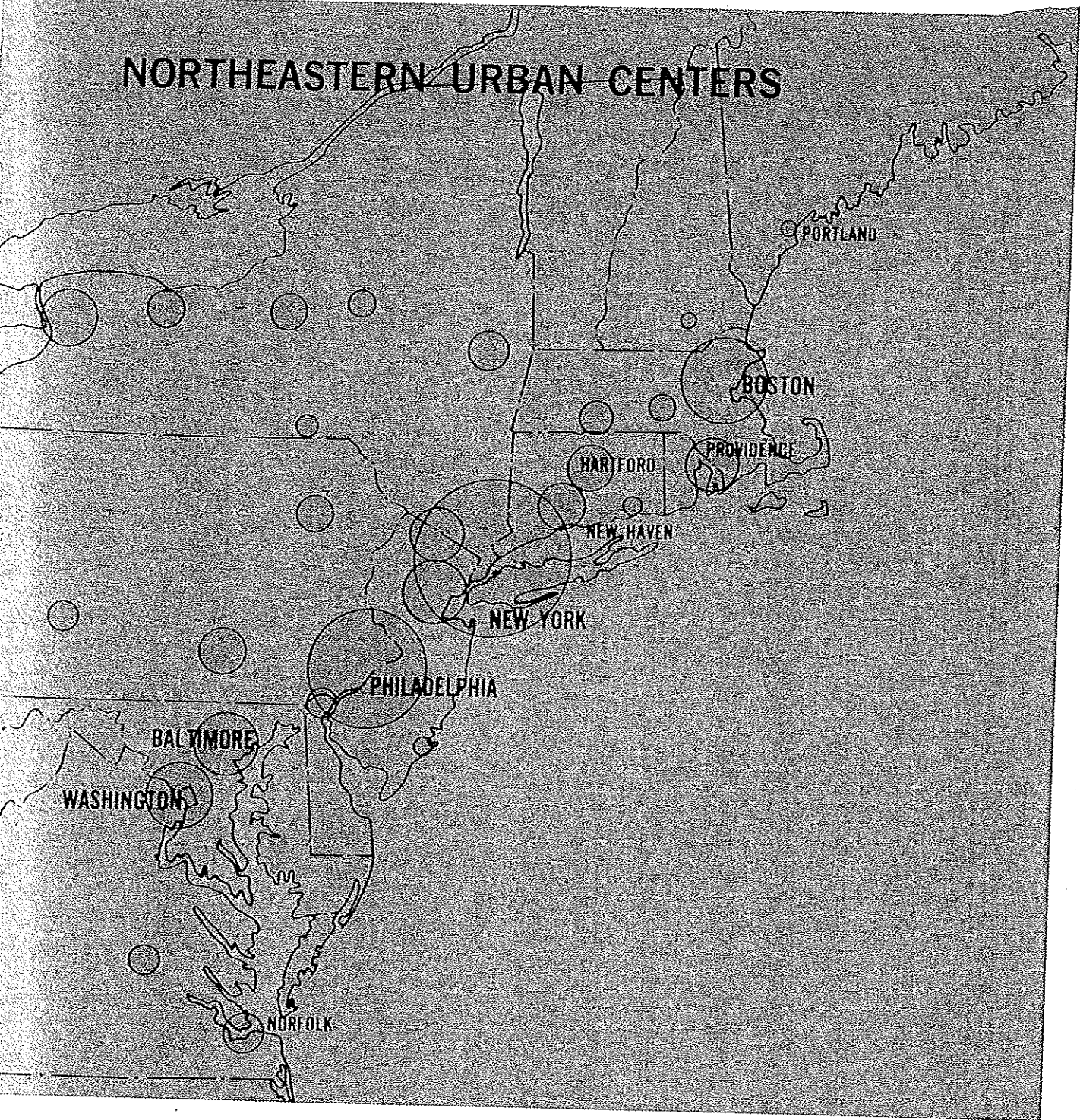
CHESAPEAKE BAY AREA







NORTHEASTERN URBAN CENTERS



REGIONAL CHARACTERISTICS

Access and Circulation

The Baltimore Metropolitan Region is readily accessible by both public and private transportation. No matter what conveyance the visitor uses to arrive in the Baltimore area the last portion of his trip to Fort McHenry must be via city streets by private automobile, taxi or a city bus line which terminates scheduled trips at the park gate every half hour throughout the day. During 1966 Fort McHenry was visited by 696,200 persons who entered the area in the following manner: 70 percent, automobile; 20 percent, bus; and 10 percent, walking.

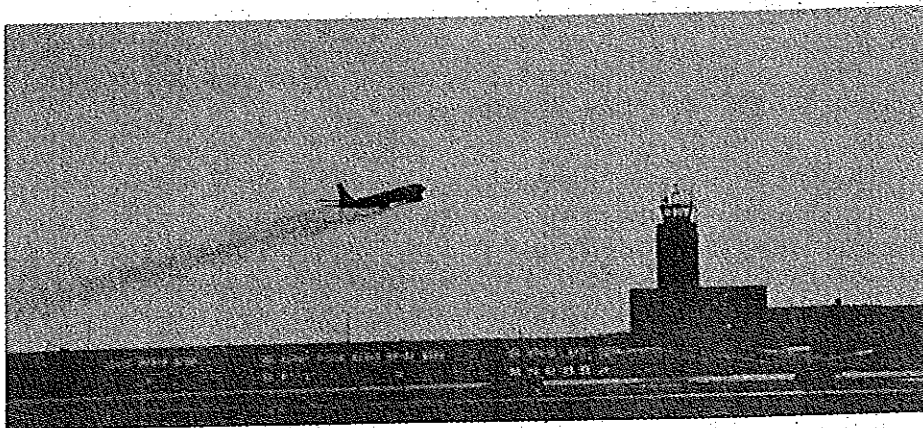
Highways

Baltimore is linked to its surrounding region by three interstate highways (I-95, I-70N, I-83), a beltway (I-695), the Baltimore-Washington Parkway, and numerous U.S. and State highways.

Commercial Carriers

Bus Greyhound and Trailways Bus Lines.

Rail Penn-Central and Baltimore and Ohio Railroads.



Air Friendship International Airport, ten miles southwest of downtown Baltimore, served by busline, taxi, and limousine.

Population Data

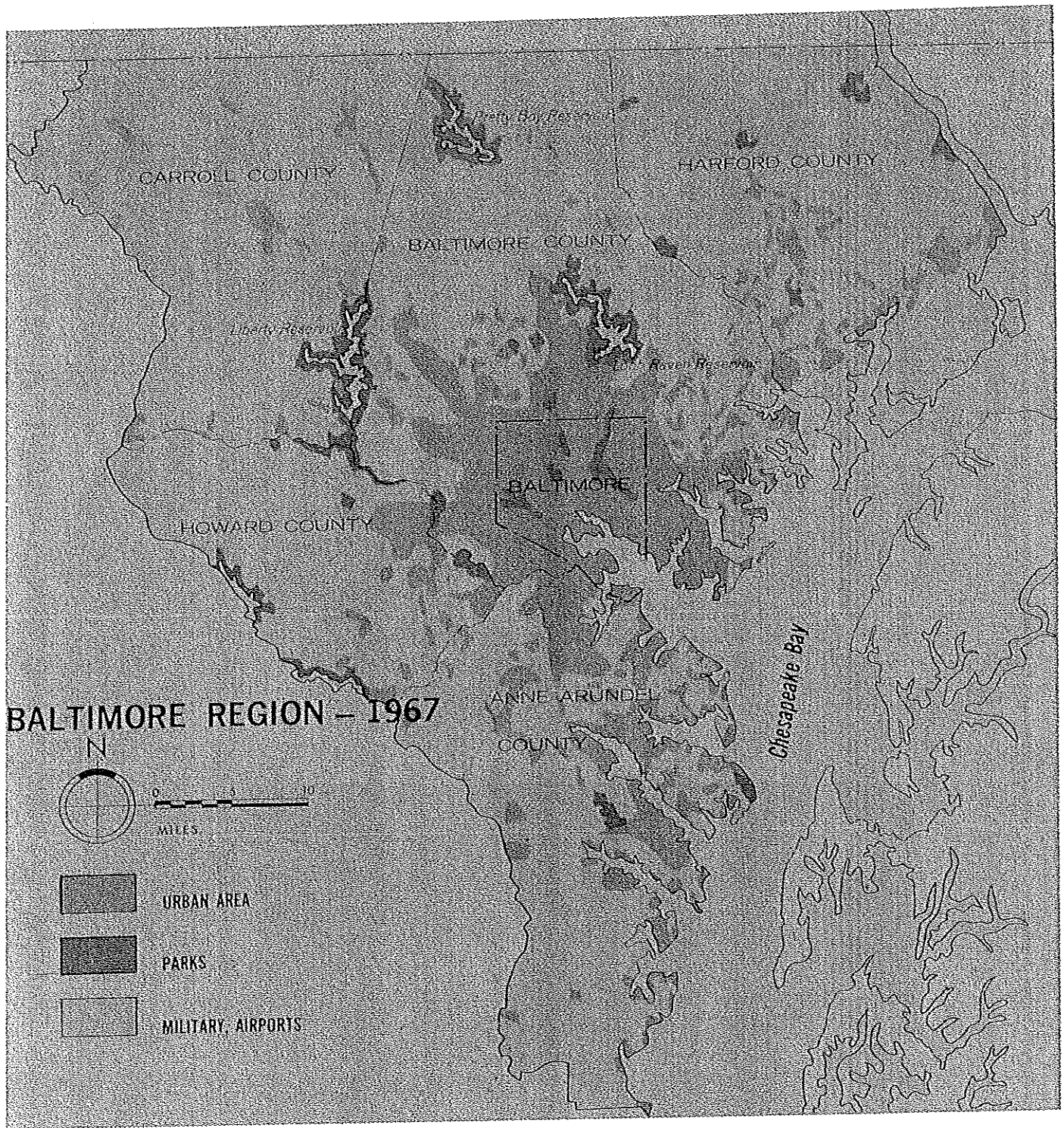
The Baltimore Region has been defined by the Regional Planning Council as consisting of Baltimore City, Baltimore County, Anne Arundel County, Carroll County, Harford County, and Howard County. This encompasses a general area of approximately 2,255 square miles, extending from the Chesapeake Bay inland for 55 miles, and from the Pennsylvania border on the north to the Washington, D.C. metropolitan area on the south. (See Regional Plan.)

The basic regional population projections are as follows:

<u>1965</u>	<u>1975</u>	<u>1985</u>
2,013,000	2,496,000	3,096,000

Of the 1965 figure, 921,200 persons resided in Baltimore in 1965. The inner city is experiencing a gradual reduction in population but this is more than compensated by the surging growth of the suburbs. The projected figure of 2,063,180 people living within 14 miles of Fort McHenry by 1980 is striking evidence of this trend. Fort McHenry's steady visitor increase (8%) at a time when the inner city is declining points to the heavy regional use of the Monument.

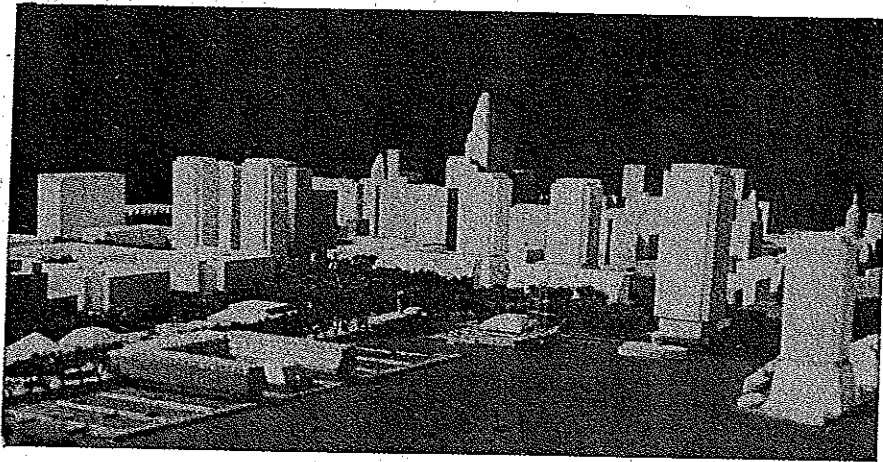
Not only is Fort McHenry accessible to a heavily populated local region but also it is within a days drive of additional millions by virtue of its location in the lower portion of the vast northeastern megalopolis.



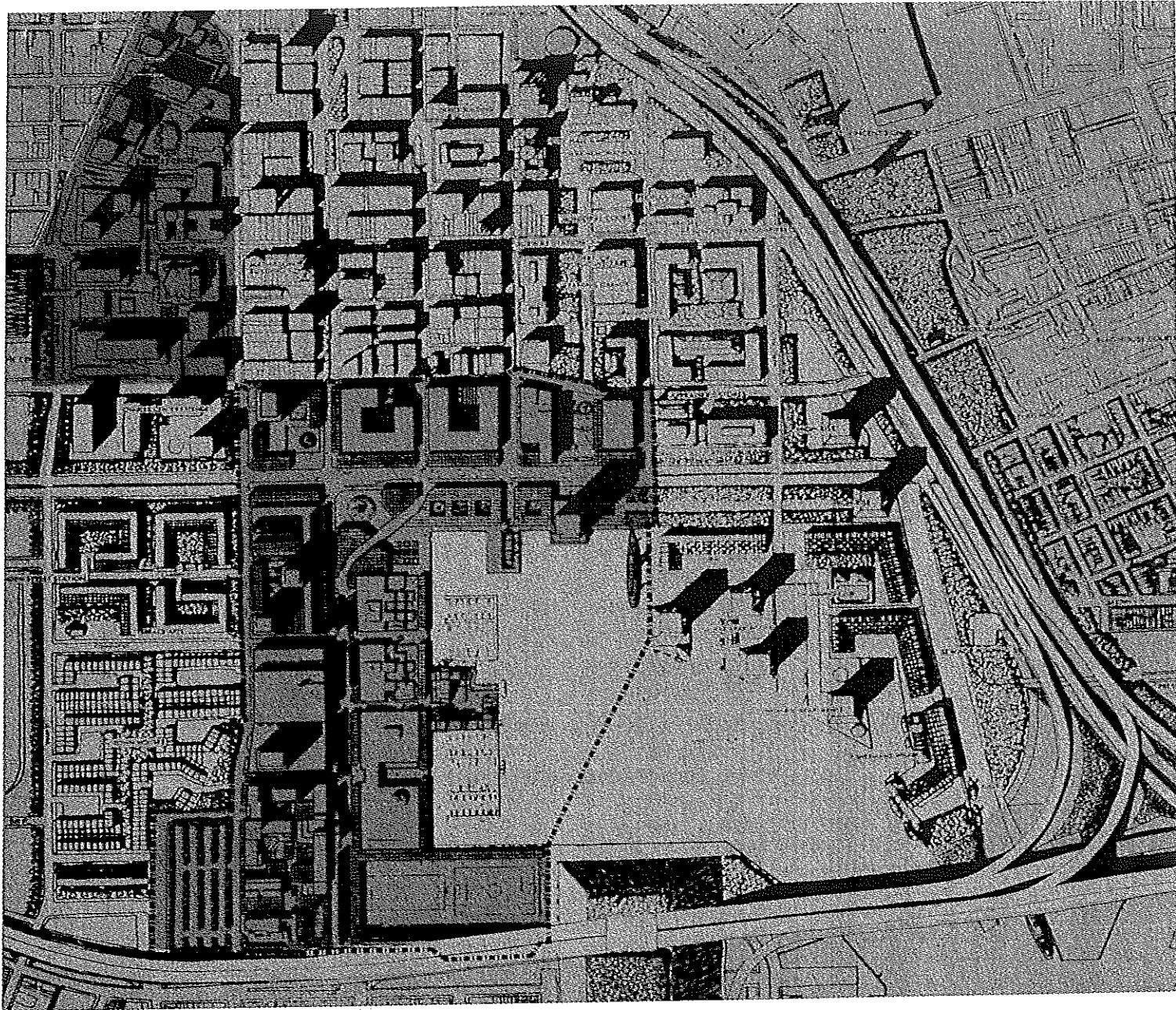
Park and Recreation Facilities

Within a short distance of Fort McHenry, the City and County operate a number of playgrounds and recreation areas. Nearby Latrobe Park provides picnicking facilities, which eliminate the necessity of Fort McHenry providing these facilities. Also in the vicinity, the City system is contemplating a large recreational complex on lands reclaimed from the Middle Branch of the Patapsco River. These two areas combined with Federal Hill will relieve a great deal of public pressure for incompatible use in Fort McHenry.

Another local project which has the potential of affecting Fort McHenry is the Inner Harbor Project No. 1 of the Baltimore Urban Renewal and Housing Administration. This project foresees a beautiful inner harbor area capable of attracting large numbers of visitors annually to its museums, cultural activities and recreation facilities. (See Vicinity Map.)



Part of Baltimore's future, the INNER HARBOR REDEVELOPMENT PROJECT, now under construction. The project will cost an estimated \$87 million.



THE INNER HARBOR




The Inner Harbor program calls for the revitalization of one entire quadrant of Baltimore's central core. The first stage, Inner Harbor Project I, contains 85 acres along three sides of the harbor basin, where the Plan calls for public and private investment estimated at \$100,000,000 during the next decade.

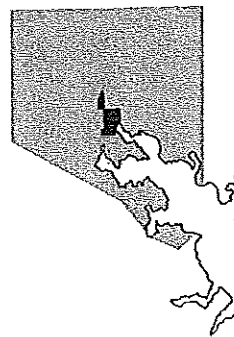
Major new construction will include a high-rise World Trade Center and other major office buildings, high- and low-rise apartment buildings, housing for the elderly, a nursing home, neighborhood center and recreation center with gymnasium.

Along the shoreline a science center, marina, "boatel," restaurants, theatres, and shops will provide enjoyment for all ages. There will be playing fields for outdoor sports, and landscaped promenades for leisurely strolls along the shore.

Project I will transform the deteriorated environment of the Inner Harbor, and provide an estimated increase of \$1,000,000 per year in real estate taxes.

Later stages of the long-range program for the area include a large complex of moderate rental housing units, a modern Municipal Center, and high-rise apartments and townhouses on the piers.

-  Charles Center
-  Inner Harbor Project I
-  Later Stages



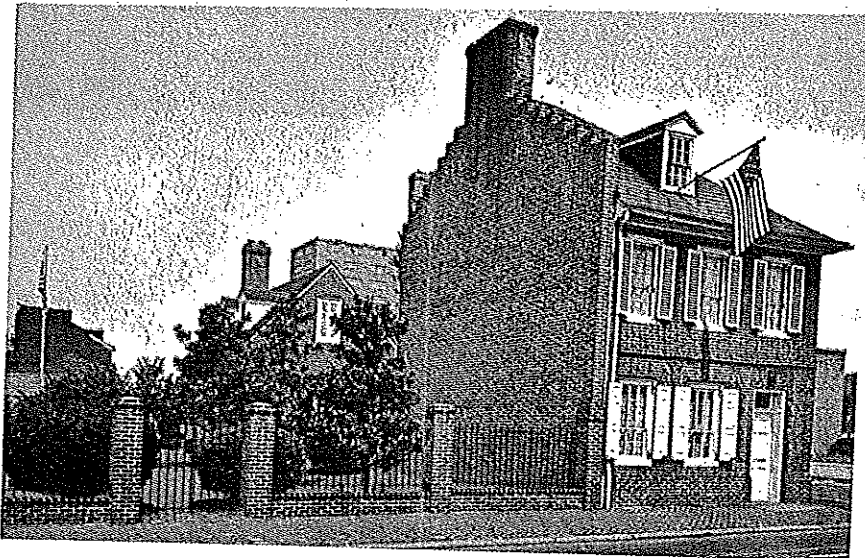
The City of Baltimore
Theodore R. McKeldin, Mayor

Historical Institutions

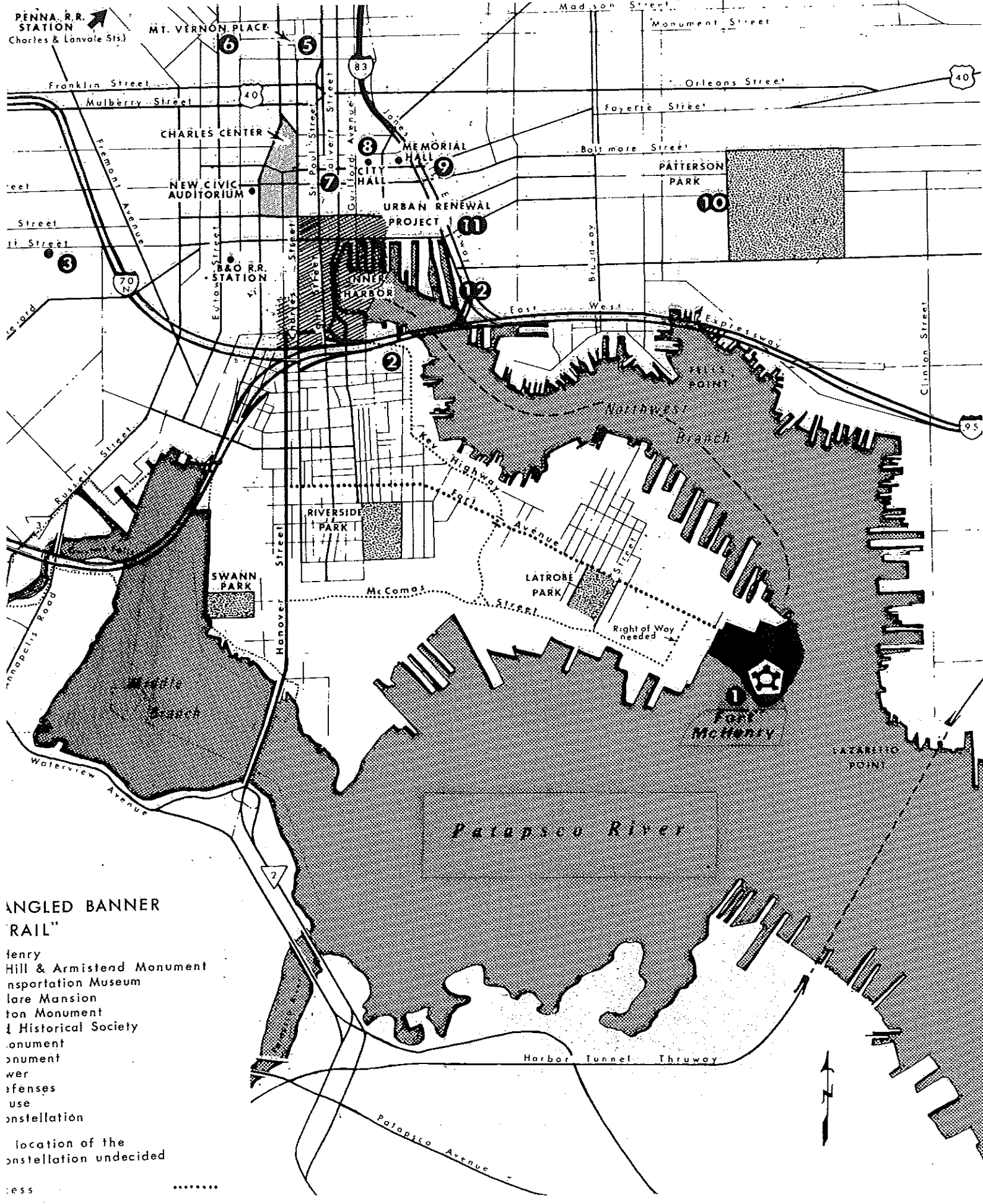
Though its formal ties are limited, Fort McHenry is linked to the several historic houses and museums of the area. These include the Maryland Historical Society, Star Spangled Banner Flag House, U.S. frigate Constellation and the Peale Museum. The Superintendent, Fort McHenry, also administers Hampton National Historic Site in nearby Towson. In addition, he acts as liaison officer--through the Northeast Regional Office--with the appropriate authorities concerned with the following historic sites in Annapolis, Maryland:

1. Colonial Annapolis Historic District
2. Hammond-Harwood House
3. Maryland State House
4. Historic Annapolis, Inc.

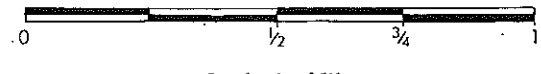
Numbers 1, 2, and 3 above have been declared eligible for the Registry of National Historic Landmarks.



STAR-SPANGLED BANNER FLAG HOUSE, Pratt and Albemarle Streets, was the former home of Mary Pickersgill who made the flag which flew over Fort McHenry and inspired Francis Scott Key to write the National Anthem, September 14, 1814. It is beautifully restored in the Federal period, and an 1812 War Museum is adjacent.



VICINITY MAP

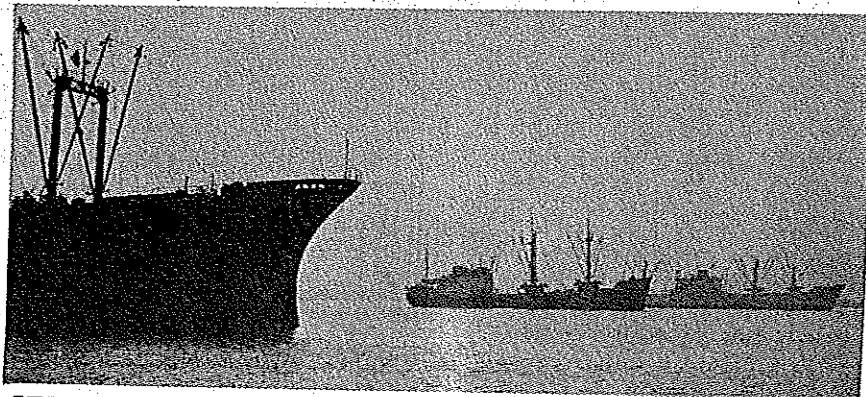


Surroundings and Existing Use

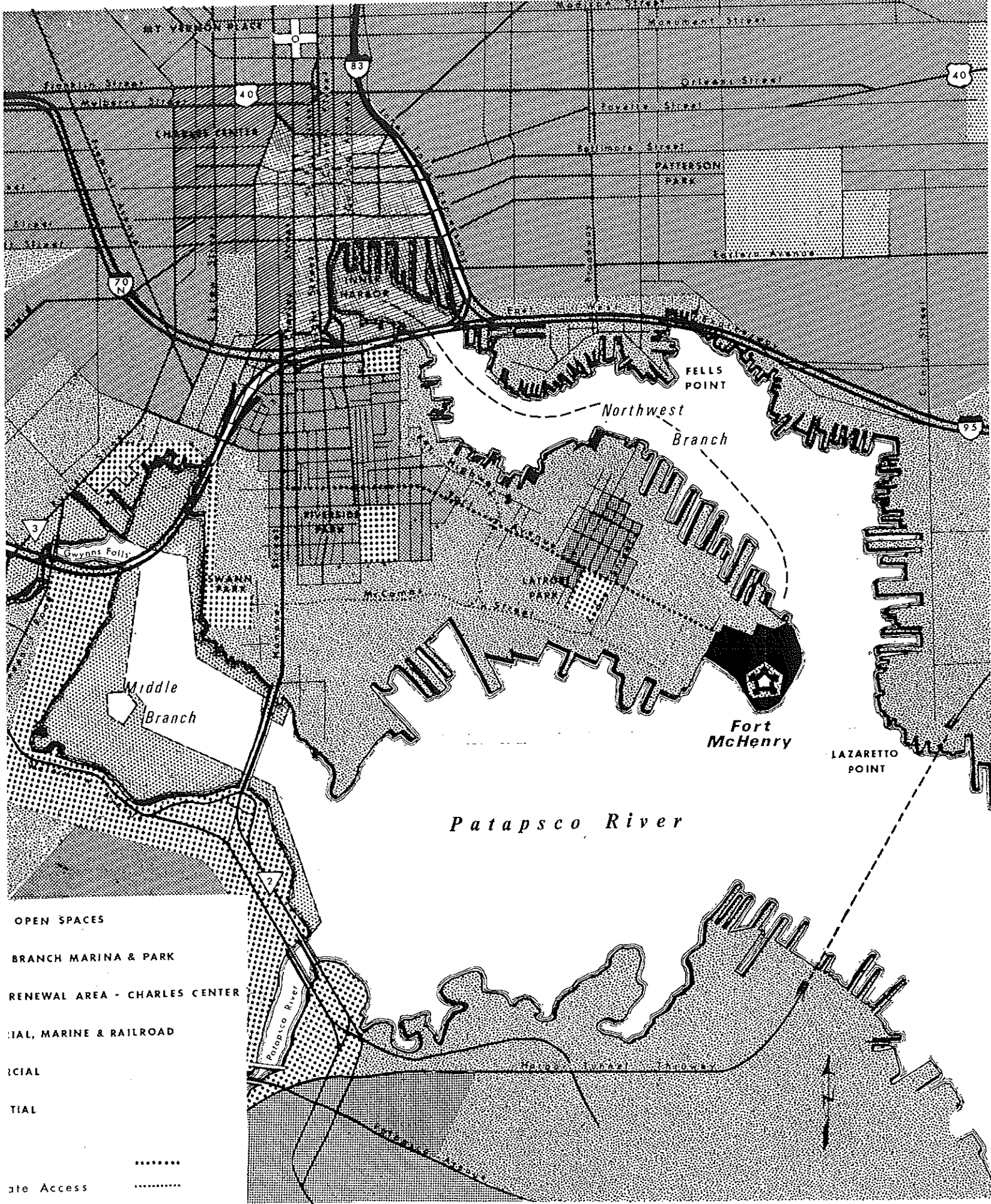
Fort McHenry occupies the tip of Whetstone Point, which divides the Patapsco River into two branches. Because of this location over half of the area's boundary lies within Baltimore Harbor. The land area outside the Fort McHenry boundary is owned either by the United States Government or the Baltimore and Ohio Railroad. The use by these land-owners and their lessees form part of a highly developed inner-city industrial-commercial complex. The U.S. Government property, which was once a part of the Fort McHenry Military Reservation, is occupied by the Corps of Engineers and the U.S. Navy Reserve. Many of their buildings are not in use and have been allowed to deteriorate considerably.

This extensive industrial development adjacent to the park, as well as those that can be seen across the harbor, contribute a myriad of sights, sounds and odors which make the re-creation of the historic scene extremely difficult.

The proximity to heavily populated rowhouse communities accounts for the area's relatively high percent of walk-in use.



SEVENTH LARGEST PORT IN THE WORLD, Baltimore has 45 miles of shoreline which is still under development.



GENERALIZED LAND USE PLAN

RESOURCE EVALUATION

History

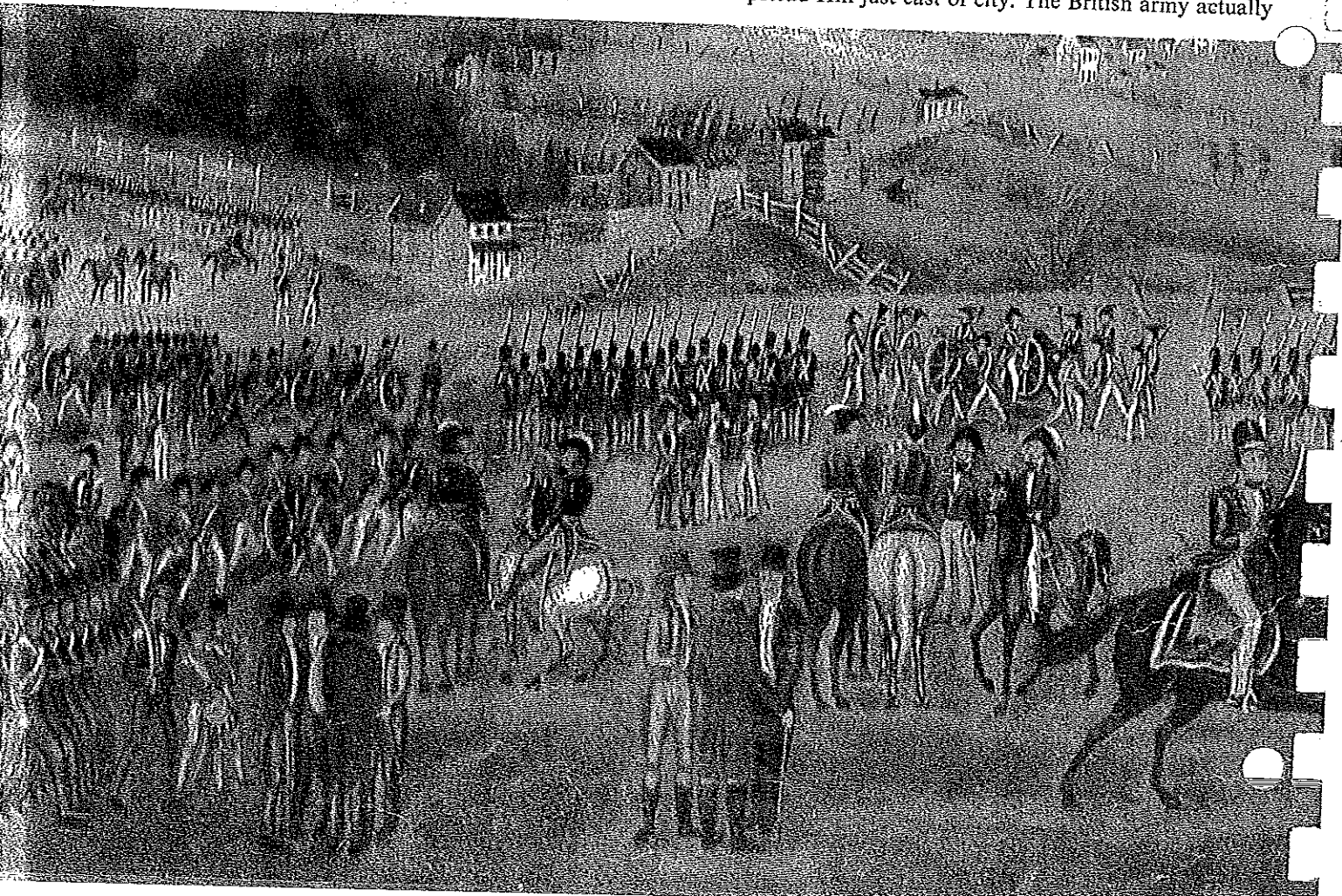
Fort McHenry commemorates a significant event in American history, Francis Scott Key's writing of "The Star-Spangled Banner," the National Anthem. The ship on which the anthem was originally drafted, the hotel where it was later refined, and the shop that printed the first handbills, have all long since disappeared, but the Fort that inspired its composition still remains. In presenting the Monument's primary interpretive story a special effort is made to relate the writing and words of the National Anthem to Fort McHenry, and the events that occurred there in September 1814.

one which flew the flag....

The Battle of Baltimore is part of the primary interpretive story of the Monument. The battle was the first time the British had been successfully opposed on the East Coast, and caused their permanent withdrawal from the Chesapeake, thus ending their mid-Atlantic Campaign of the War of 1812.

BALTIMORE is prepared by General Samuel Smith (center) as British fleet sails up Patapsco River (far

right) and bombards Fort McHenry. Smith assembled some 10,000 militiamen on Hempstead Hill just east of city. The British army actually



Secondary themes that could be touched on at Fort McHenry include the Revolutionary fort on Whetstone Point, the National Ensign, and Fort McHenry's post-1814 use.

Archeology

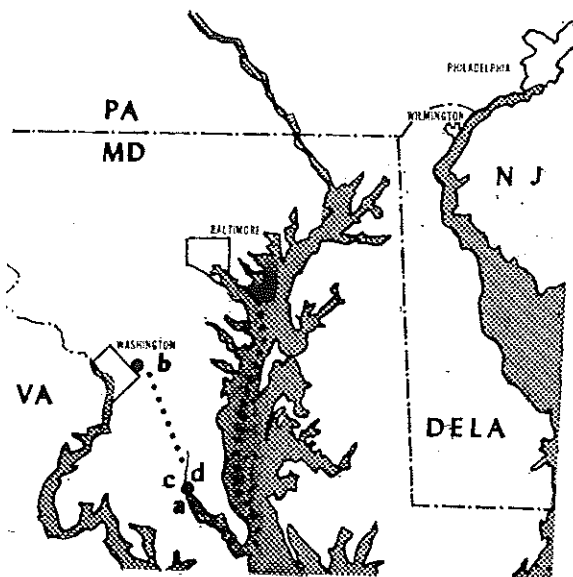
Fort McHenry had a long and varied use as a military post. Because of this the Fort and its outworks underwent many physical changes. Historical archeology can assist in the identification of these changes and provide new information for the future restoration of the historic scene.

Certain areas outside the Star Fort may prove extremely difficult for the archeologist because of the numerous and extensive site alterations, particularly in the Civil War and World War I eras.

nal battle took place, partly because the American
> formidable and partly because the British general

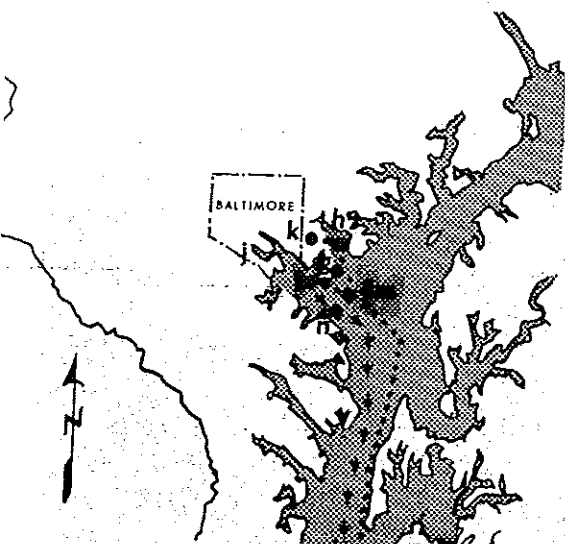
was killed by sharpshooters during a preliminary skirmish. Painting is
by Thomas Ruckle, an American militiaman who took part in the action.





BRITISH CHESAPEAKE OPERATIONS
AUGUST-SEPTEMBER 1814

- a - Aug. 19 - British troops land at Benedict
- b - Aug. 24 - Battle of Bladensburg
- c - Aug. 30 - British troops reembark at Benedict
- d - Sept. 6 - British ships leave Benedict to attack Baltimore
- e - Sept. 11 - British ships arrive at North Point



BATTLE OF BALTIMORE
SEPTEMBER 12-14, 1814

BRITISH ADVANCE
BRITISH WITHDRAWAL - - - - -
AMERICAN LINES —————

- Sept. 12 (7 AM) - British troops land at North Point
- Sept. 12 (mid-day) - American riflemen kill Gen. Ross
- Sept. 12 (2:30 PM) - British push aside American Resistance
- Sept. 13 (6 AM) - Naval bombardment of Fort McHenry begins
- Sept. 14 (1 AM) - British attempt to land troops in Ferry Branch
- Sept. 14 (1:30 AM) - Lacking naval artillery, support British troops withdraw from assault positions
- Sept. 14 (7 AM) - Naval bombardment of Fort McHenry suspended
- Sept. 15 (late morning) - British troops board transports at North Point
- Sept. 17 (late afternoon) - British fleet leaves Patapsco River

RESOURCE DESCRIPTION

History

Fort McHenry's significant historical resources and interpretive story place it within the "Political and Military Affairs, 1783-1830," Historic Theme Studies.

Whetstone Point was recognized very early as a strategic location for military defenses to protect Baltimore's water approach. As early as 1776, an earthen fort and complementing batteries were erected on the Point. Fort Whetstone, as it was known, was only a temporary work, and in 1794, construction on its successor began. The new fort, named in honor of James McHenry of Baltimore, was largely completed by 1803.

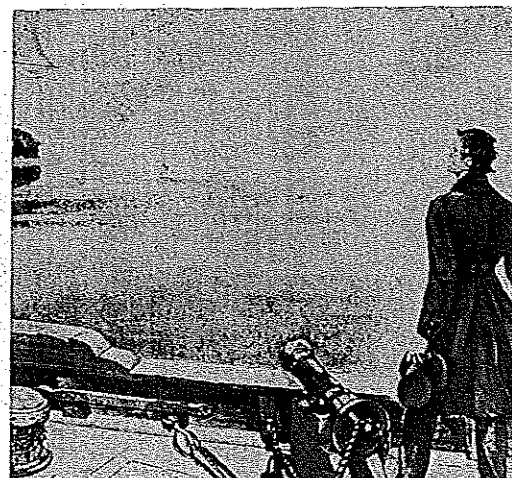
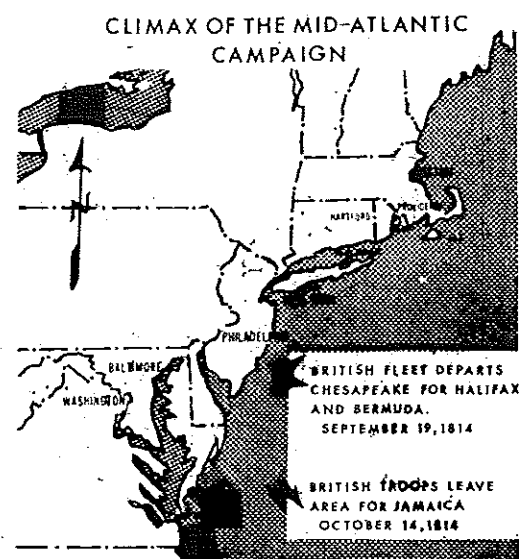
In June of 1812, the United States declared war against England. By the end of the year the British had proclaimed a blockade of Chesapeake Bay and dispatched a naval fleet to the area.

At first the enemy's activities were confined to raids on Bay towns and harassment of the residents. The capitulation of Napoleon, however, permitted the British to transfer battle-hardened troops to the American theater and intensify their Chesapeake campaign. Baltimore in turn became a prime objective of the British, and following the capture of Washington, they turned their attention to this important commercial center. Both the Federal Government and the Baltimore citizenry anticipated an eventual British attack and prepared for the city's defense. Fort McHenry was strengthened and satellite defense works were constructed. In September 1814, the British moved against Baltimore in a joint land and naval offensive.

The capture or destruction of Fort McHenry was the key to the success of the British campaign. Unless the Fort's guns could be silenced, the British fleet could not move close enough to give enfilade support to their land forces advancing against the American lines east of the city. At dawn on September 13, 1814, the attack on Fort McHenry commenced. An estimated 1800 shells, bombs and rockets were fired by the British, but only a few direct hits were scored, and they caused only minor damage to the Fort. After 25 hours of bombardment it was evident to the British that naval gun fire along could not reduce Fort McHenry, and they abandoned the attack on Baltimore. (See Historic Base Map, page 31)

Prior to the battle, Francis Scott Key met the British fleet in the Chesapeake Bay to secure the release of Dr. William Beanes who had been taken prisoner during the Washington campaign. The release was granted, but because the Americans had learned of the pending attack on Baltimore, they were required to remain with the fleet until after the battle. From a truce ship behind the enemy lines Key and his party watched the attack on Fort McHenry. The sight of the American flag was Key's only assurance that the Fort had not fallen. The 25 hour bombardment was an agonizing period for Key and it was only after the fleet began sailing away, that he knew for certain Baltimore had been saved. In a moment of patriotic fervor to commemorate this event, Key drafted his poem. It was later adapted to music and in 1931 officially became the National Anthem.

The Fort was never again under enemy fire. During the Civil War a Confederate prisoner-of-war camp was established at Fort McHenry. From 1917 until 1923, the U.S. Army General Hospital No. 2 was located here. During World War II the U.S. Coast Guard and Navy had small detachments stationed in the Monument.



The Monument includes all of the property of the 1814 period, and most of the land which comprised the Civil War and World War I military reservations. The U.S. Navy and Army Corps of Engineers maintain installations along the Monuments north boundary that once were part of the Fort McHenry post.

Fort McHenry of 1814 included the following known structures: Star Fort, dry moat, and ravelin, with an approach road and trestle bridge; guardhouse, commanding officer's quarters, powder magazine, cistern, two soldiers' barracks and flagpole, all within the Star Fort; an upper and lower battery with either magazine or hot shot furnaces, located between the Star Fort and the waterfront; and a wooden barrack, store and gun house, stable and storehouse, and hospital, also located outside the Star Fort. There were possibly other miscellaneous structures on the reservation, but they have not been identified. (See Historic Base Map.)

The ravelin and Star Fort with its interior buildings, except the cistern and reconstructed flagpole, are the only 1814 structures that have survived to the present. Their appearance, however, is representative of the Fort's 1830-40 historical period. The site of the four 1814 period buildings outside the Star Fort have been located and marked for the visitor. The site of a tavern which stood just beyond the Fort's boundary in 1814 has also been marked.

The Civil War powder magazine, an outer battery of the mid-nineteenth century, the sally port entrance to the Star Fort, and the 1837 brick wall on the west boundary, are the only structures in the Monument from other periods of military occupation.

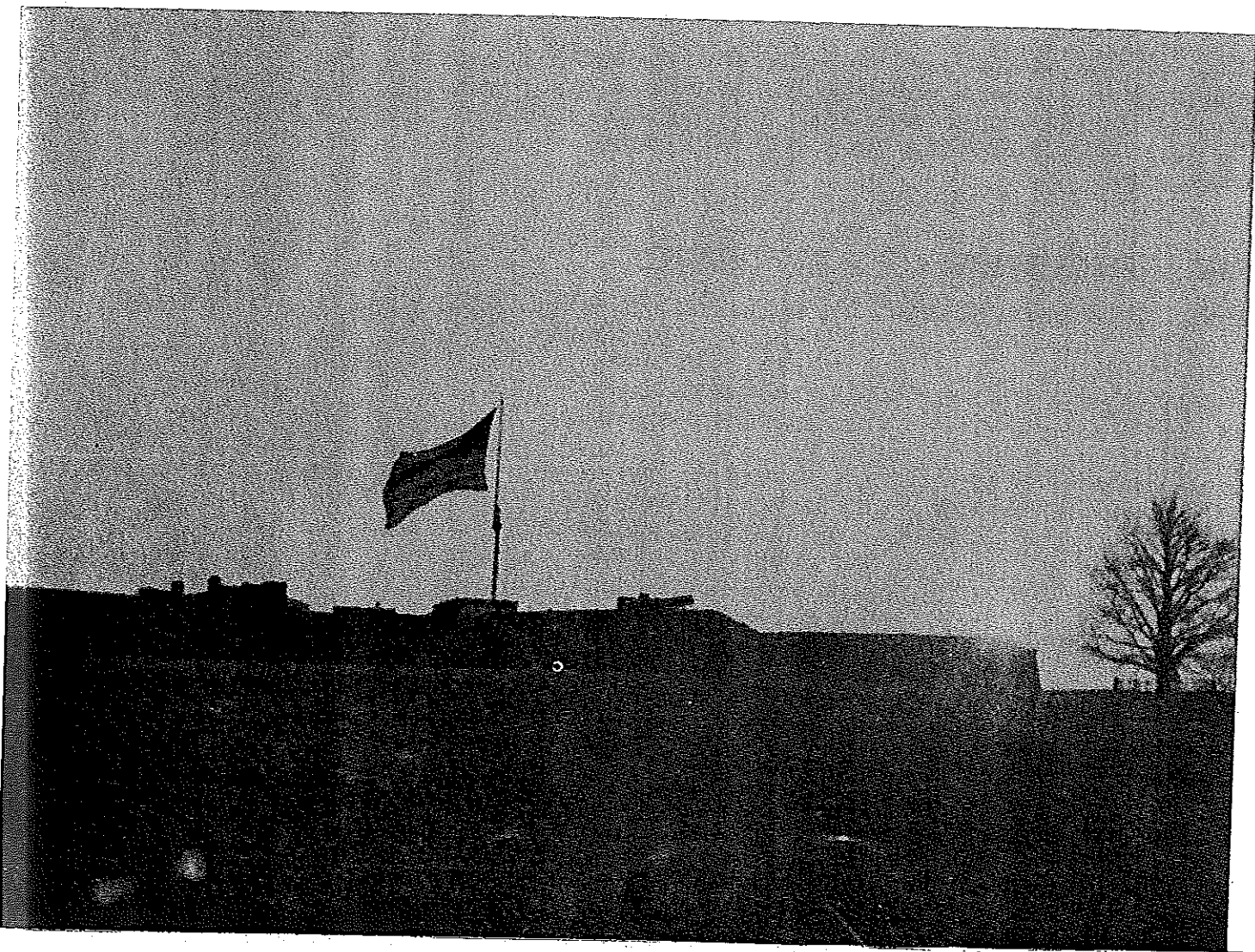
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Archeology

Many of the facts used in determining the appearance of Fort McHenry in 1814 have relied heavily on historical archeology. To date the following projects have been concluded:

<u>Date</u>	<u>Investigator</u>	<u>Purpose</u>
1958	G. Hubert Smith	Location of flag-pole, 1819 boundary wall and traverse for powder magazine.
1958	John Cotter Lee H. Nelson	Clarify architectural questions relating to interior Star Fort buildings.
1961	John Cotter	Identify brick drain across courtyard.
1963	Hamilton H. Carson	Investigate barrack foundation.
1963	J. Duncan Campbell	Further investigation of barrack foundation.



THE PLAN

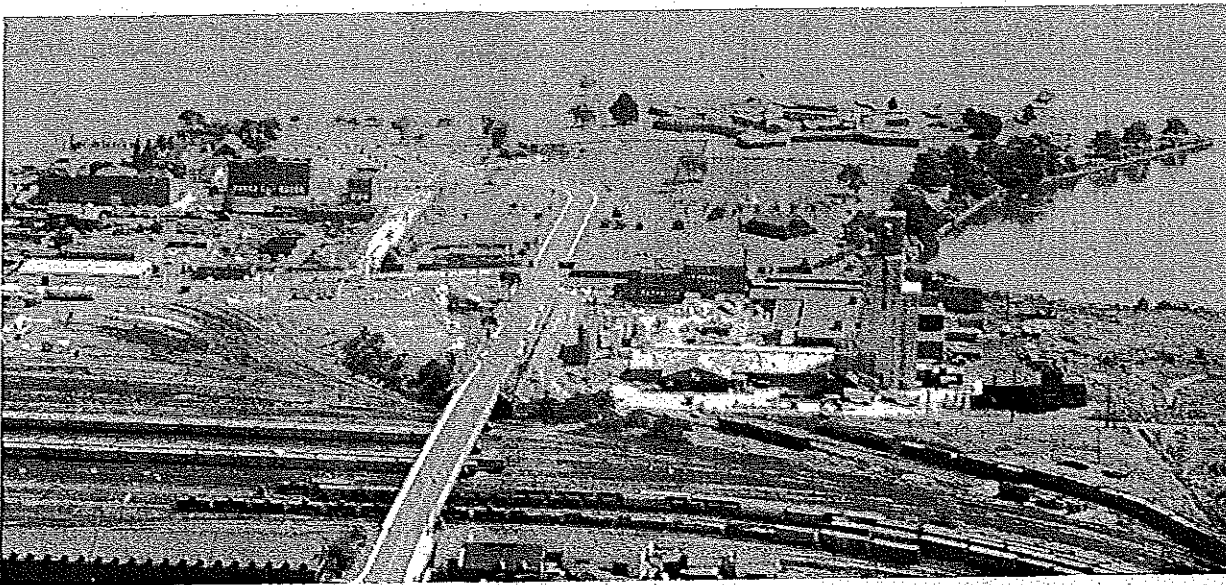
ACCESS AND APPROACHES

1. Park Identification:

A directional sign system for visitor guidance should be established in cooperation with highway agencies and the Regional Planning Council (see page 18). This system should start at key points on the peripheral interstate highways, include all principal arteries entering Baltimore and conclude at city streets adjacent to the Monument. Signs should be distinctive, boldly designed and easily identified--similar to those used on turnpikes and throughways.

Suitable signs should also be placed in the airport and bus terminals and in the railroad stations.

Technical assistance from Design and Construction, WSC and Interpretive Planning, WASO will be necessary. (See Architectural Theme p.67.) Consideration should also be given to incorporating in certain Monument literature the identifying symbols used in signs.



2. Improvement of Approaches:

At present the only approach to the Monument is via Fort Avenue, running east from Hanover Street (Maryland 2), nearest access from the south and crossing Charles and Light Streets which provide access from downtown Baltimore to the north (see Vicinity Map, p. 23).

Fort Avenue is congested, dangerous, and for much of its length, treeless. The eastern portion near the Monument is flanked by empty and unsightly portions of industrial sites, fringed by trash and weeds.

The Service should vigorously encourage both public agencies and private landowners to improve this situation for the good of both city and Monument. Vacant private land should be developed for public recreation, thus enhancing the Monument approach and lessening pressure for inappropriate use within the Monument.



An alternate route should be established and recognized--with city and industry cooperation--on Key Highway and McComas Street. (See Vicinity Map, page 10). From this intersection the route would follow McComas Street east to Fort Avenue via a new right-of-way through the property now leased to Southern States Cooperative (see General Development Plan, page 77).

Although this route passes through a heavily industrialized section (Baltimore and Ohio Railroad main terminal), it is a broad, open highway which could be visually improved and has relatively little vehicular traffic. It would be especially useful, with police assistance, in routing visitor traffic away from high density residential areas during periods of heavy visitation. (Founders' Day: 15,000 to 25,000.)

Regarding approaches, the following statements quoted from Baltimore's Parks and Recreation Study are highly pertinent:

"Objectives: To develop recreation, open space and environmental considerations relating to the city's transportation system.

"To outline the possible contribution of private individuals, institutions and industries.

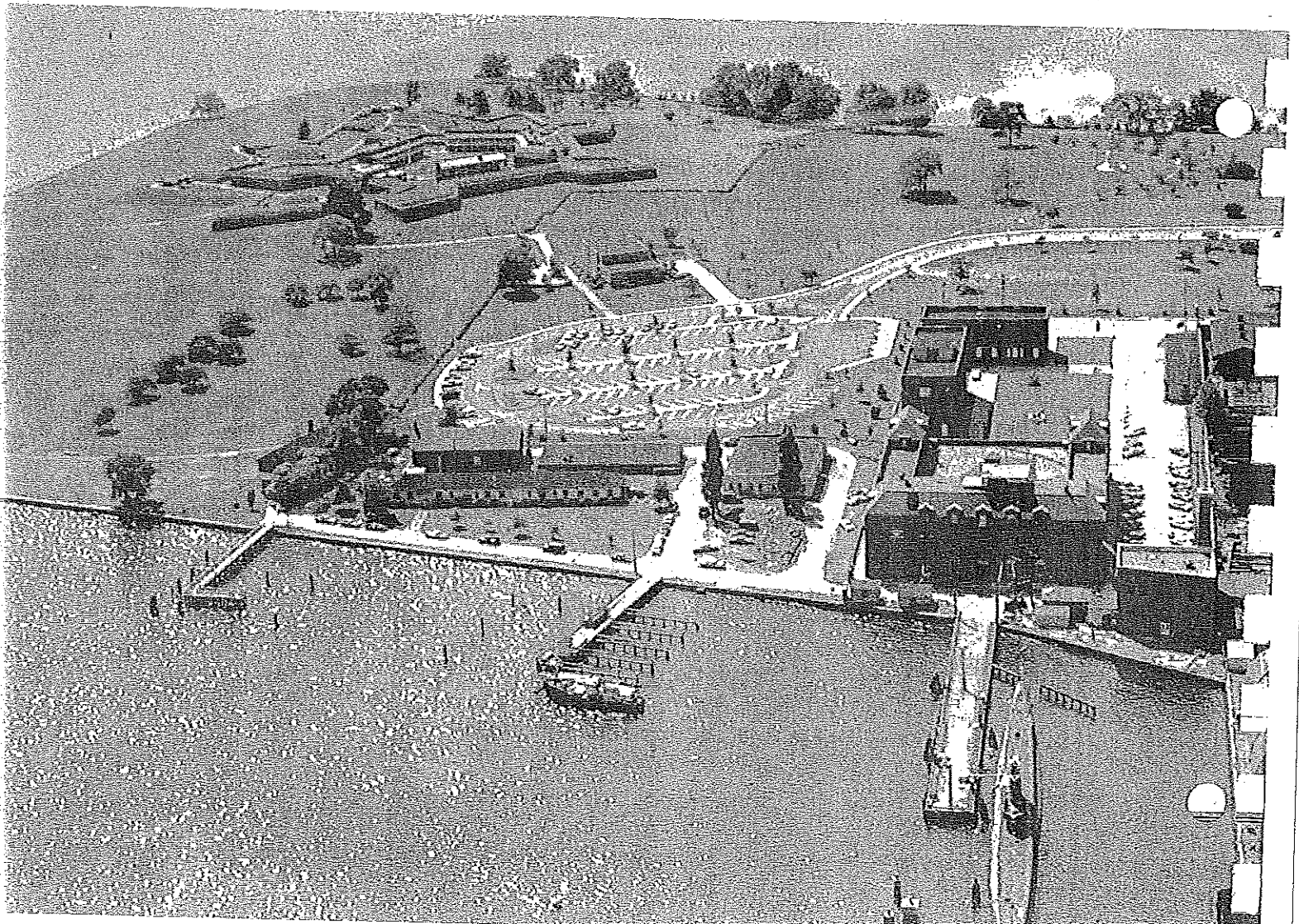
"Guidelines for Policies: Utilize the city's streets, parkways and expressways as a recreational and open space asset. . . The approaches to Baltimore, along with city streets and major thoroughfares linking various activity areas. . . should become part of an overall green belt and parkway system. They should connect major park and recreation areas, and where feasible sufficient right-of-way should be acquired for other recreational use.

"Recognize that open space means more than. . . parks or vacant land, and encourage the vital role of the individual, private enterprises and institutions. The provision of a full range of leisure time activities and open space is greatly dependent upon private enterprise, and non-profit organizations."

3. Water Approach:

A launch service, operated either by a concessioner or in conjunction with the Inner Harbor Project 1 development should be established to provide an interesting experience for visitors and to reduce vehicular traffic into the Monument. Such a tour should also include a trip down the harbor to the site where Key witnessed the bombardment. (See Historic Vicinity Map, page 23.)

Acquisition of the Corps of Engineers property, essential to parking area expansion, could also provide docking space for this service. Such acquisition would probably require relocation of the Baltimore City fireboat station. (See General Development Plan, page 77.) This building and the adjacent pier at which the fireboat is berthed are rented by the Baltimore Fire Department from the Corps of Engineers.



APPROPRIATE USE AND SETTING

This plan seeks to foster in the visitor a serious, respectful attitude toward the Monument and the events it commemorates and to ensure him a satisfying experience free from distractions. The following proposals are designed to achieve these aims.

Control of Use

1. Improve Entrance

The present gate is too narrow for entering and departing vehicles to pass safely. It should be widened to permit this and to incorporate an entrance station for control and for collection of fees. A turn-around lane should be provided just inside the entrance to permit departure of persons deciding not to enter the Monument without delaying traffic.

Payment of a fee here will be more equitable than the present system of paying a fee at the Star Fort and will permit a more dignified entrance into the Fort and eliminate the unattractive booth now used there. Also, fee collection at the gate will reduce the number of persons entering for reasons not really compatible with the serious Monument purpose. And control here will lessen the danger of vandalism.

The city of Baltimore should be advised of this new procedure so that officially designated traffic lanes and signs can be established on Fort Avenue.

Since the boundary wall containing the entrance does not have historic significance, the new entrance should be straightforward and functional in design and not attempt to reproduce any period character. (See Architectural Theme, page 73).

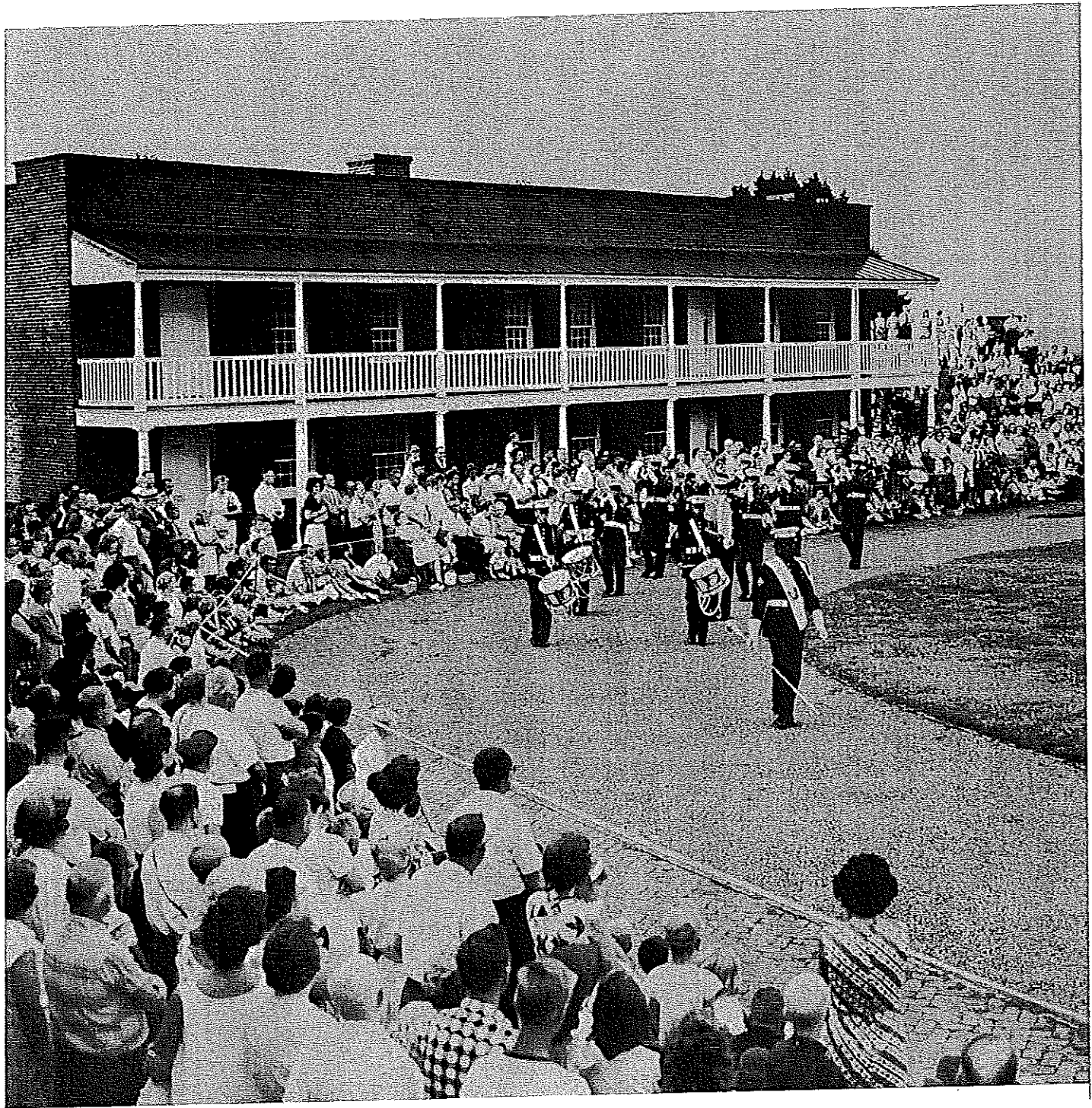
2. Divert Non-conforming Use

Many persons now enter the Monument merely to park their cars, eat lunch and read the newspaper. Others seek to play ball, picnic or simply to stroll along the sea wall briefly without entering either the Visitor Center of the Star Fort.

The Service should actively encourage the public to visit other facilities better suited for these uses. Specifically, it should recommend use of Latrobe, Riverside and Swan Parks west of the Monument and vigorously support the city's plans to establish a vast multi-use marina and park in nearby Middle Branch. (See Vicinity Map, page 23. Note: this will accommodate boaters now attempting to dock at the Monument sea wall.) Further, the Service should urge the city to establish a "harbor view" promenade, perhaps at Lazaretto Point or Point Breeze, which would also provide an interesting water view of the Fort. And, the recently started Inner Harbor Project (see page 20) in central Baltimore will eventually offer a broad range of cultural, recreational and entertainment facilities.

3. Conformable Ceremonies

On past occasions outside groups have conducted within the Monument activities more closely resembling commercial entertainments or spectacles than significant historical presentations. The Service, of course, should cooperate where possible, but always in the context of its responsibility to ensure appropriate use. All ceremonies conducted within the Monument should be directly controlled by the Monument staff and clearly and firmly related to the historic events the Monument was established to memorialize.



4. Jurisdiction

The Service now exercises exclusive jurisdiction within the Monument. In view of the various changes recommended above, this is a logical time to consider possible advantages to be gained by a change to another form of jurisdiction involving authorities outside the Service. The Superintendent should study this matter with the Regional Office and forward appropriate recommendations to the Director.

5. Boating Control

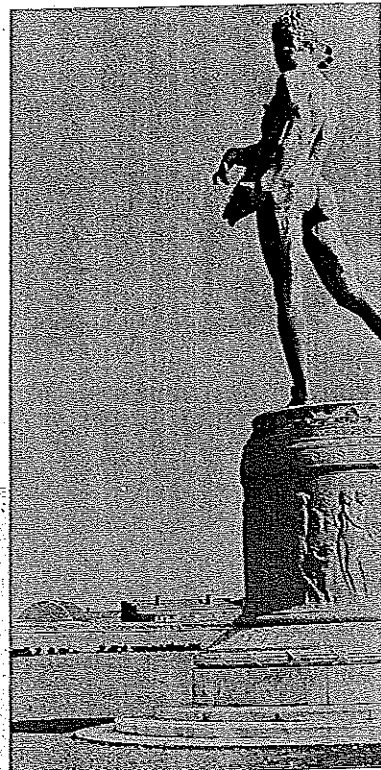
Control should be obtained over the harbor waters near the sea wall, to prevent pleasure boats from discharging passengers for picnicking or other inappropriate activity disturbing to the serious atmosphere proper to the Monument. Agreement should be obtained from the Coast Guard to establish and enforce a Restricted Zone as shown on the General Development Plan (page 77).

Removal of Intrusions and Distractions

1. Orpheus Statue

This startling green figure over 30 feet high, competes seriously with the Star Fort as the major element in the Monument especially since it is the first thing the visitors see on entering. (See Architectural Theme, p. 73.) There should be no distractions from the Fort, which is itself the best possible memorial to Francis Scott Key and the men who served in the Battle of Baltimore. Further, the statue spoils the interesting view of the Fort from the pleasant seating area on the high ground near the Civil War Magazine.

This statue could be more effectively and appropriately displayed in a large formal plaza in downtown Baltimore. Since Orpheus was the God of Music in Greek mythology, a logical place would be near a concert hall, possibly in the cultural center of Inner Harbor Project 1. Congressional action will be necessary, since Congress appropriated funds for the statue (Act of July 29, 1914) which was erected in 1922.



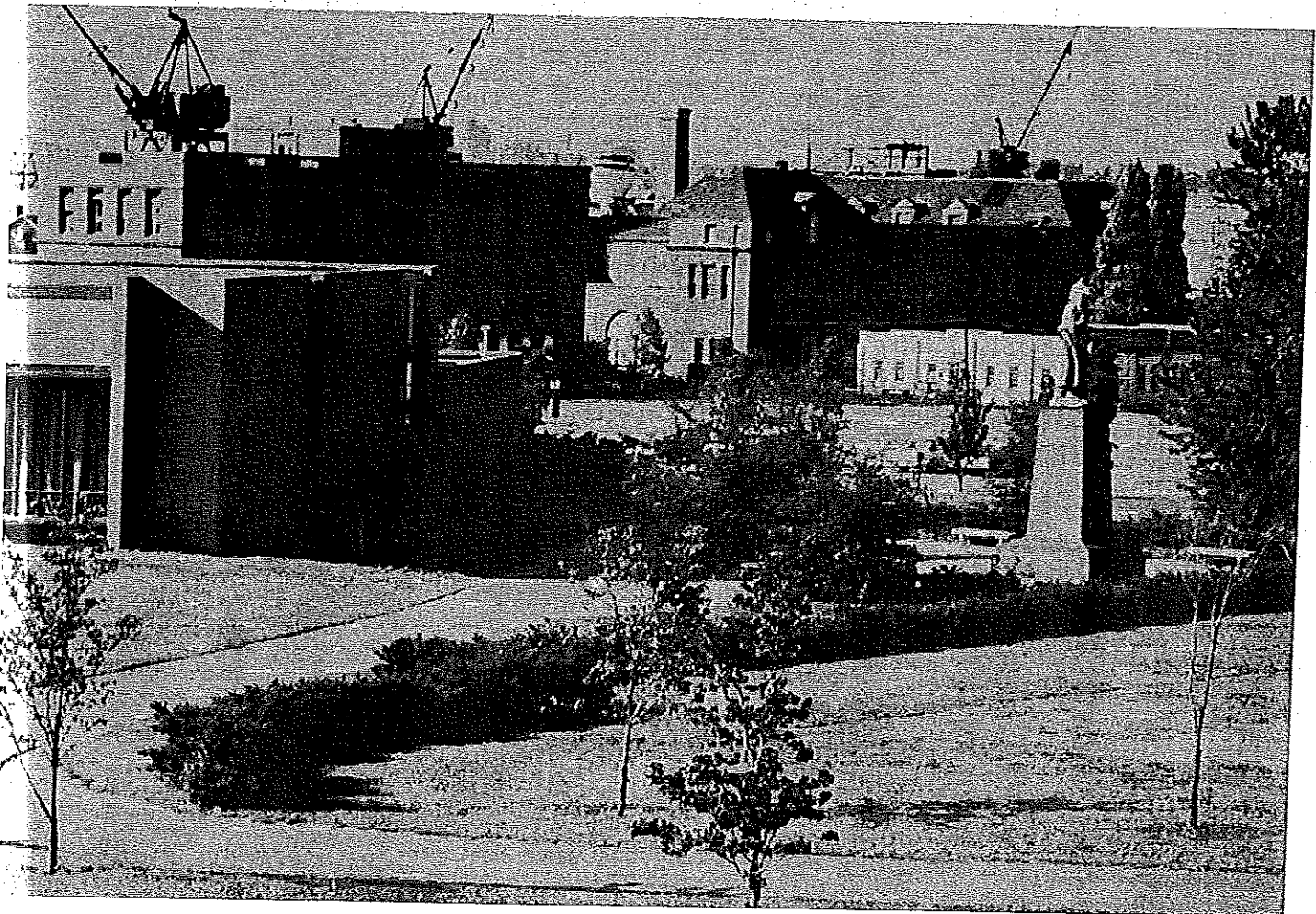
2. State Markers and Flags

These small markers flanking the entrance drive are scarcely noticed by visitors arriving in vehicles. To visitors arriving on foot who can see them, they raise a question, since there are fifty, and there were only 18 States at the time of the bombardment. Finally, further confusion arises on the occasion when the fifty State flags are in place, since the central purpose of the Monument is to commemorate the National Ensign.

These elements deflect attention from the main theme and disturb the simple austere Monument character. They should be relocated in a more suitable setting such as the plaza facing the new Federal Building in Charles Center.

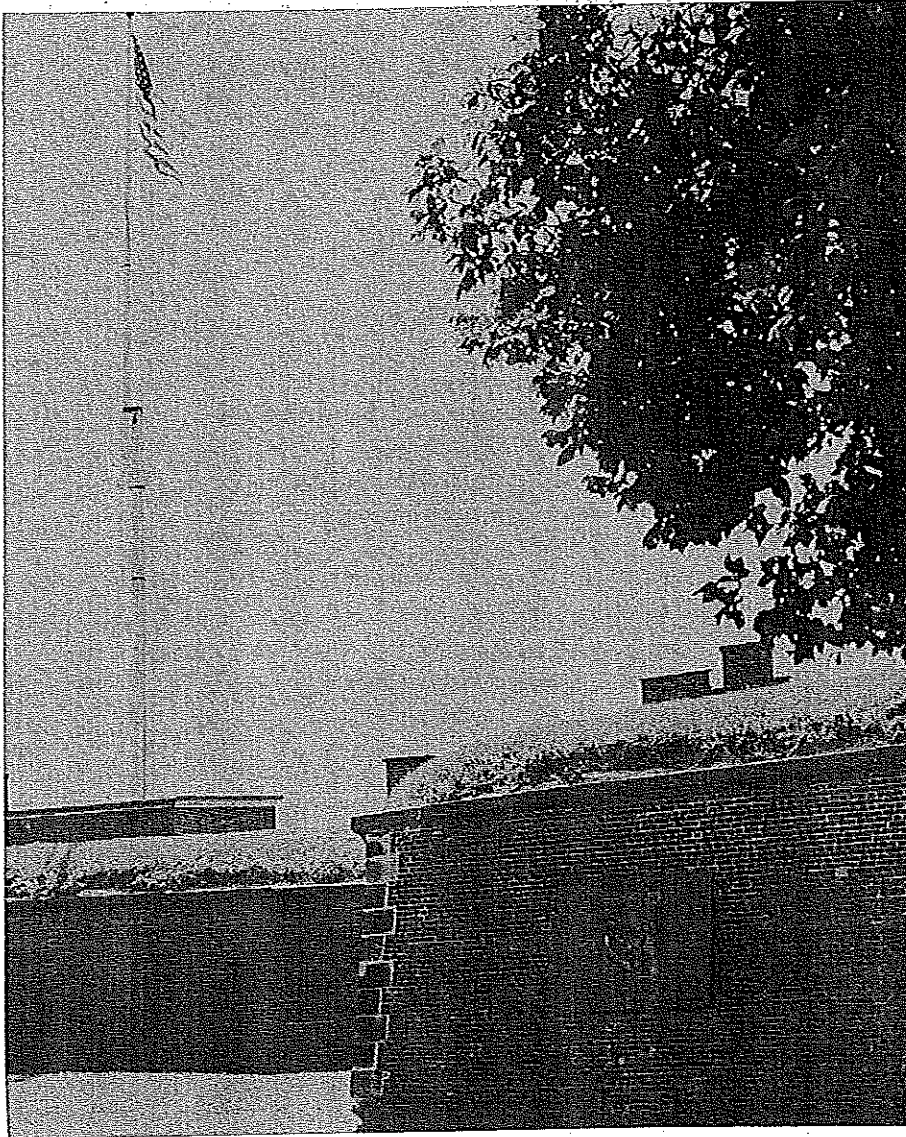
C. Armistead Statue

This figure is on a high pedestal more appropriate to a large formal city square than its present location in a small intimate plaza near the Visitor Center. The pedestal height should be reduced to 3 or 4 feet to give a better scale with the immediate setting and the adjacent building.



4. Washington Elm

The iron fence and concrete walk ringing this fine tree detract visually from it, have no functional purpose and should be removed.



5. Plaque on Fort Wall Near Sally Port

This metal marker, stating that the Fort was "given" to Baltimore is a blemish on the Fort wall and is inaccurate. The Act of May 26, 1914 merely gave the city permission to use the reservation as a public park. This act was repealed by Act of March 3, 1925. The plaque should be removed.

F. Coast Guard Range Marker

This ungainly steel tripod towers 30 feet high directly in the visitor's line of vision as he moved down the walk from the Visitor Center to the Star Fort--a sight hardly calculated to put him in a receptive frame of mind for an historic experience. The Service should request the Coast Guard to remove it.

G. Concessioner Operations

Some of the items sold - gaudy banners, ash trays, rifle "pens" - are of questionable taste, and more seriously, inappropriate to this important setting. Merchandise should be limited to publications, pictures, authentic replicas, etc., which have real significance in relation to the Monument purpose.

The argument is raised that the concessioner cannot do this at a profit. In that case the Service should obtain the services of a cooperating association such as the Eastern National Park and Monuments Association. An appropriate atmosphere at Fort McHenry is more important than a souvenir counter.

INTERPRETATION AND VISITOR USE

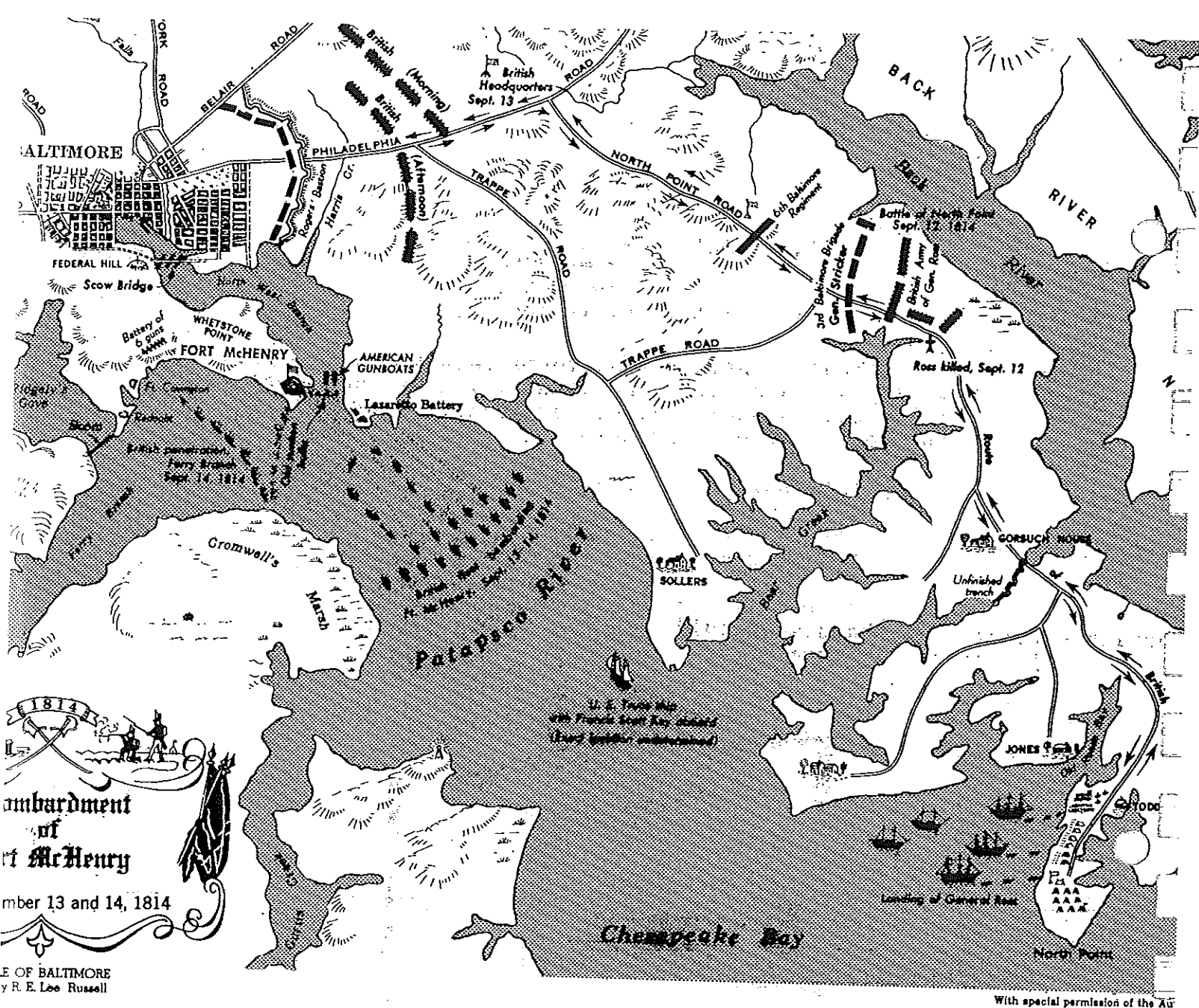
Interpretive Theme

Fort McHenry's primary interpretive story has two significant aspects: the composition of the words of the Star-Spangled Banner by Francis Scott Key and the Battle of Baltimore.

A. Star-Spangled Banner

Needless to say, the origin of the National Anthem during the bombardment of Fort McHenry is one of the most dramatic stories of American history. Where better to present this story than at the Fort whose defense inspired its creation?





B. Campaign and Battle

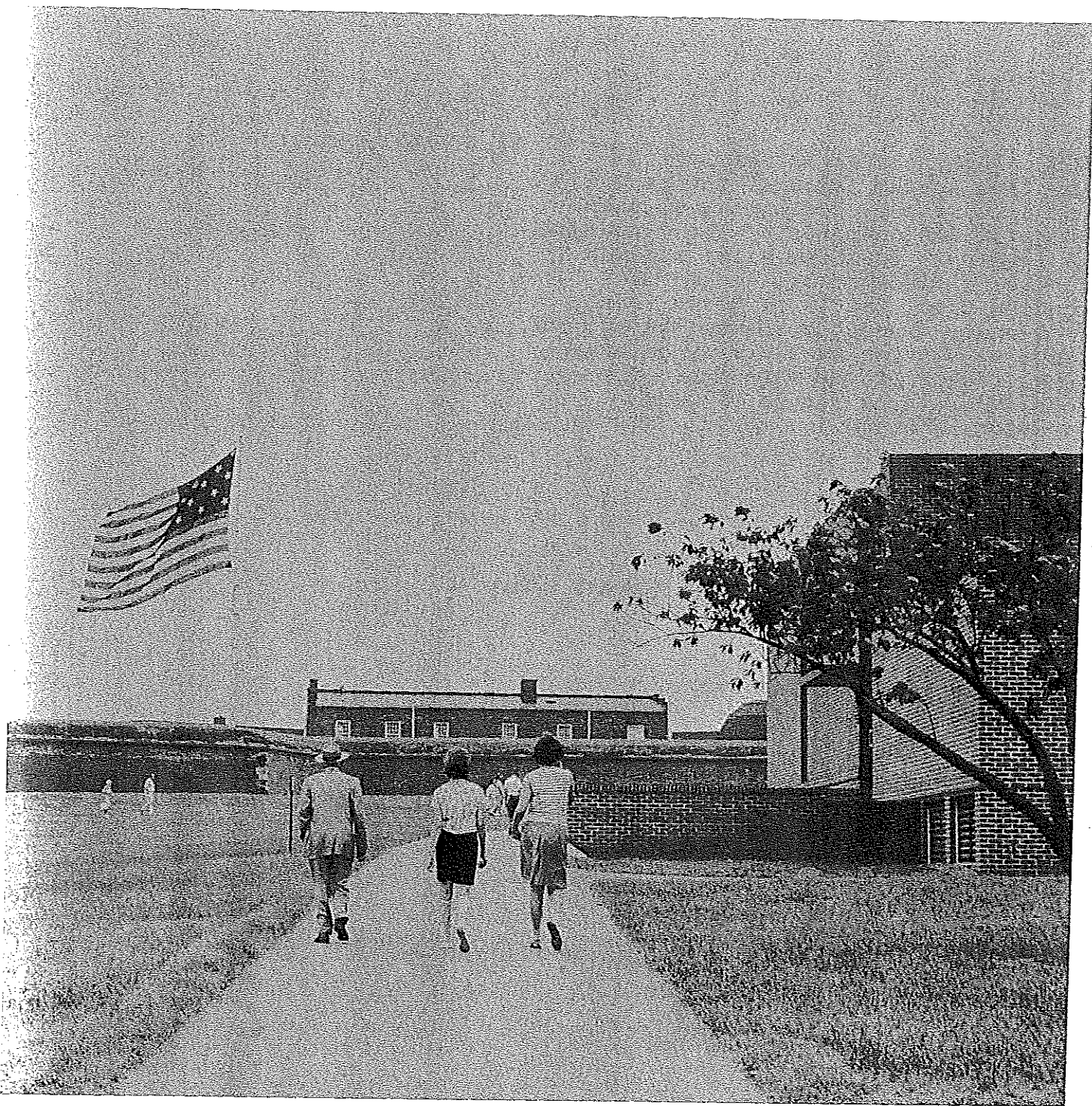
The attack on Fort Mifflin was not an isolated incident but rather a portion of a larger operation. In order to present an intelligent understanding of the battle it is necessary to interpret the entire Mid-Atlantic Campaign of the War of 1812. Only by presenting the strategy and results of the battle and campaign can the visitor understand its tremendous significance.

Also, Fort McHenry is the logical location to tie together the several roadside markers and monuments that identify action sites of the campaigns. An inventory of these sites includes; Battle of Bladensburg, North Point landing site, Battle of North Point, site where General Ross was killed, and Rodgers' Bastion on the city defense line. See Historic Base Map, "Chesapeake Area" (page 48) for location of above.

C. Secondary Themes

These aspects of the Fort McHenry story will be touched on briefly -

1. Pre-1814 military activity on Whetstone Point
2. The Civil War and Fort McHenry
3. Evolution of Baltimore harbor and defenses (would include Forts Armistead, Carroll, Smallwood Howard.)



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Interpretive Method

In order to establish an effective setting in which to interpret the Monument story, the area lands will be divided into two zones: a zone for modern development and an historic zone. The dividing line between the two zones will be the 1814 Fort McHenry boundary.

A. Development Zone

The visitor use facilities will be developed outside the 1814 Fort McHenry boundary. In this zone the visitor will pay his fee, park his automobile, and begin his journey back into history.

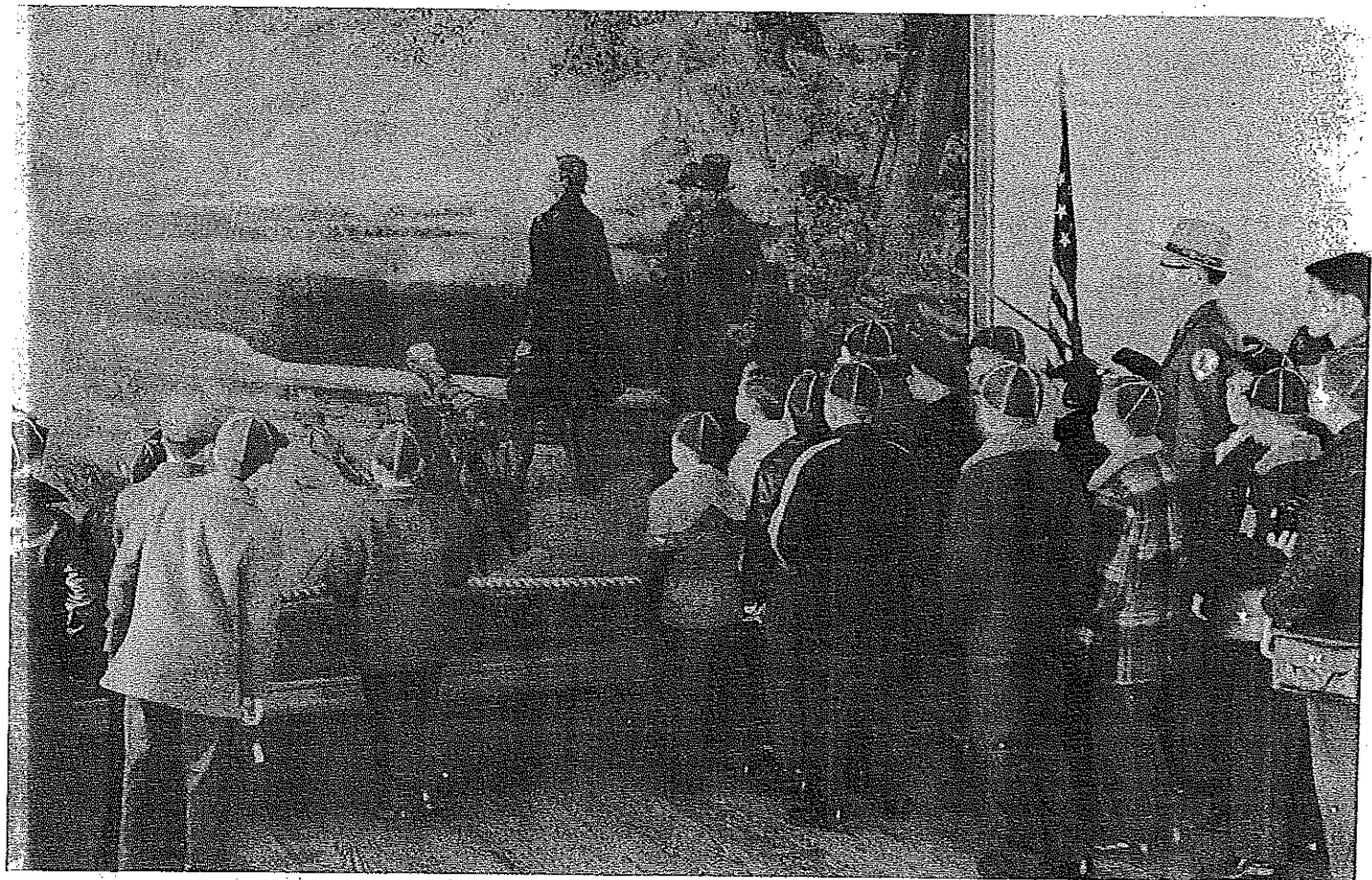
A visitor use facility such as the 1963 visitor center is desirable to stimulate, orient and provide a historical background for the visitor. In order to serve the park visitor and properly carry out the function of the staff this building must be enlarged. An expansion of the audiovisual facilities is already necessary in order to serve the area visitors. Since the audiovisual program will remain the principle interpretive device, exhibits should be simple and few in number.

Interpretive literature and appropriate replicas will be available from a concessioner. Free literature that can be secured at the information desk will be keyed to function as a guide to the historic zone.

All activities inside the building should prepare and encourage the visitor to tour the historic zone. Effective landscaping should be used to direct the traffic flow and screen the development zone from the historical zone.

B. Historic Zone

The principle interpretive feature of the area is the Star Fort itself. Through the years the Fort has received numerous alterations, but most of the basic structures remain. With the exception of the magazine and the sally port it will generally be restored to its appearance at the time of bombardment. Alterations at the two exceptions were made shortly after the battle so it is felt that this would not be deviating too far from the historic period.



When the visitor leaves the building he will enter the historic zone by skirting the marked foundations of the stable and gunshed. These two buildings, as well as the nearby barrack, hospital, and tavern, were standing in 1814 but have long since been destroyed. Their locations have been determined by archeology and the sites are to be interpreted. From the vicinity of the tavern the visitor will follow the historic road across the moat, through the restored ravelin, and across the trestle bridge into the Star Fort.

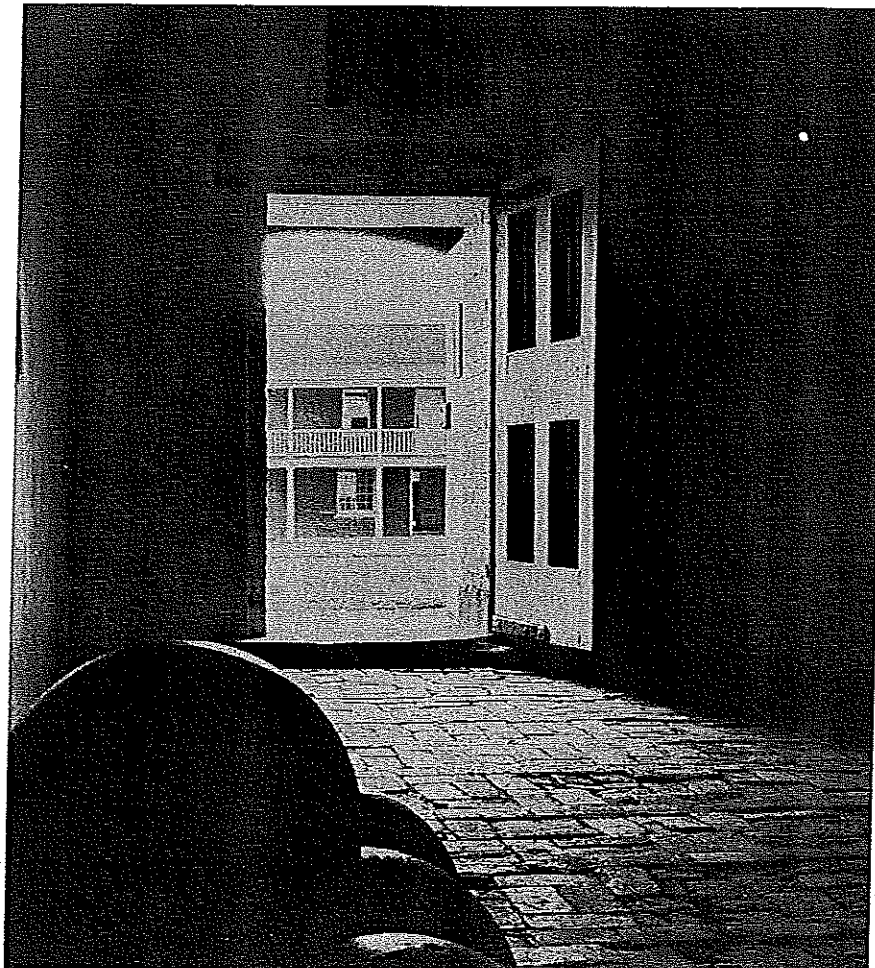
Near the reconstructed flag pole (flying a full size 42' x 30' flag) the visitors may assemble for a conducted tour of the Star Fort. Interpretive personnel inside the Fort are to be dressed in an appropriate uniform of a unit that served at Fort McHenry during the bombardment. These men, using the Guard House as a headquarters will provide scheduled tours and act as roving interpreters. The personnel that the Monument receives through the Student Assistant Historians (in cooperation with Northeastern University) and the Student Conservation Association programs could be worked very nicely into these positions.*

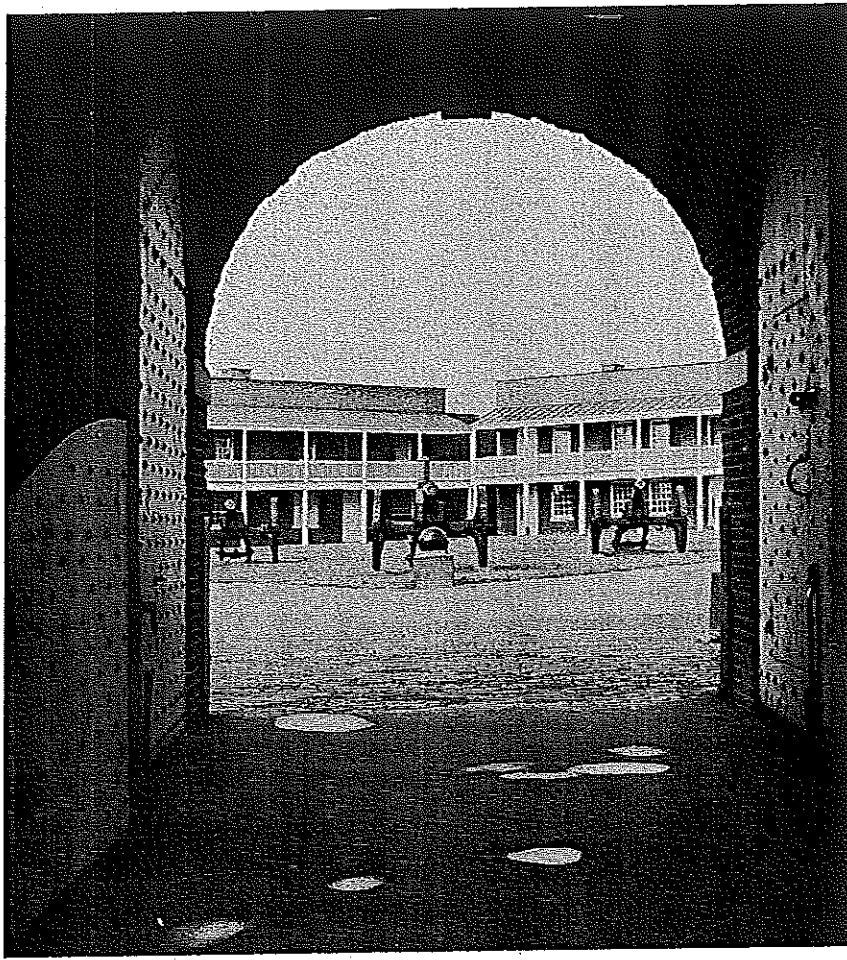
Gun platforms in the bastions will be replaced and one battery given a full complement with random pieces being scattered throughout the Fort. Trees on the terreplein and parade will be replaced.

*Members of "Scabbard and Blade," an honorary group of the R.O.T.C. unit at the University of Maryland, might also take part on special occasions.

Building interiors could be utilized in the following manner:

<u>Building</u>	<u>Interior Use</u>
Guard House (1)	Refurnish interior as active guard quarters.
C.O.'s Qtrs. (2)	Refurnish commanding officer's quarters. Adjutant's office will remain vacant for visitor flow.
Powder Magazine (3)	Refurnish interiors with powder barrels and projectiles.





Building

Interior Use

Officer's
Qtrs. (4)

End rooms to be furnished as a medical dispensary and officer's quarters. Middle room left vacant for visitor flow.

No. 1 Soldiers'
Barracks (5)

*Refurnish end rooms and basement kitchen as enlisted quarters with center room vacant for visitor flow.

No. 2 Soldiers'
Barracks (7)

*One open room with seats and demonstration area for special group programs.

*Functions of these two buildings could be reversed - see

When the visitor completes his exploration of the Star Fort's interior he will leave by returning through the sally port and ravelin. Outside the ravelin he may decide to return to the parking area or take the walk that will allow him to inspect the reconstructed upper water battery and the outlined lower battery. Interpretive devices will help him understand the role these fortifications played in Fort McHenry's defense. A trail marker near the lower battery will then provide him with a choice of returning immediately to the parking area or taking the longer walk via the Civil War magazine to his automobile. Exhibits at the magazine will outline Fort McHenry's post-1814 military use.

C. Off-Site Interpretation

An off-site interpretive program at Fort McHenry is of primary importance. By involving clubs, civic groups, etc., the purpose and type of use of the area can be explained in such a manner that will gain popular support of the regional residents. The Monument staff, by preparing kits and visiting schools, can give organized groups an orientation prior to a on-site visit. This could eliminate some of the congestion during periods of heavy school group use. Also, off-site presentations will add prestige to the Monument and the Service as a whole.

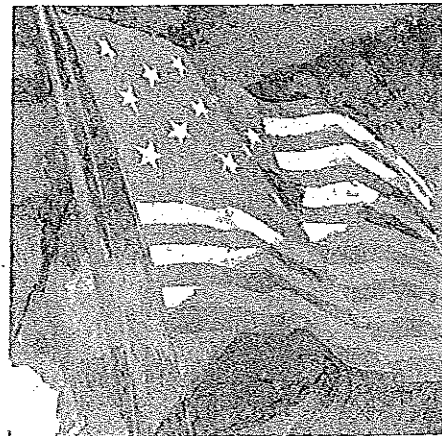
Interpretive Needs

A. Cooperation with Others

In the Baltimore area there is a sizeable academic community with which the Monument staff should maintain contacts. Friendly relations between the two could prove a mutual benefit in research and artifact acquisition. Monument source materials could be made available to responsible researchers, who in return could produce studies that would assist the Monument with its restoration and interpretive program. A list of such organizations would include: University of Maryland, Johns Hopkins University, Peabody Institute, Maryland Historical Society, Peale Museum, Society for the Preservation of Maryland Antiquities, Star-Spangled Banner Flag House Association, and the Mayor's Commission on Historic and Architectural Preservation.

B. Use of Large Flag

During the bombardment of Fort McHenry the flag that inspired Francis Scott Key in his creation of the National Anthem was a mammoth 42 feet x 30 feet ensign. Everyone agrees that it would be desirable and effective to use a flag of this size on the restored flag pole in the Star Fort. The use of a flag of such large dimensions creates several problems; they are expensive, the high winds will cause them to be blown to shreds in short order and the flag pole can be easily broken with so great a weight at its tip. These problems are serious, but perhaps private industry can be enlisted to provide a solution. In any case the large flag should be flown as soon as practical.



C. Furnishings Plan

In order to accurately refurnish the interiors of the buildings in the Star Fort a comprehensive furnishing plan must be prepared. Considerable research will be necessary in order to insure an accurate plan.

D. Water Approach

Consideration should be given to a launch service - perhaps sponsored jointly with Inner Harbor Project 1 authorities - as a means of providing visitors a dramatic approach to the Monument and a way to decrease intrusive vehicular traffic. The tour might include the site of the ship from which Key witnessed the bombardment. (See Vicinity Map, p. 23.)

E. Identification of Sites

The following Baltimore sites should be pointed out in the interpretive program, and suitable markers installed by an appropriate organization. This could be worked out cooperatively with a local historical group (see A. above).

Star-Spangled Banner

Original draft	Fountain Inn (now Southern Hotel)
Handbills	"Baltimore American"
First publication	"Baltimore Patriot"
Song published	Thomas Carr, Music publisher 36 Baltimore Street

Prominent Persons in Battle

General Samuel Smith	House
General John Stricker	House

Preservation of Historic Collections

The present Monument collection of some 2,500 items consists mainly of objects uncovered during archeological excavations on the site, many of which should be valuable in providing clues for Star Fort restoration. Other groupings include Civil War ordnance, the E. Berkley Bowie gun collection and an assortment of American Flags. The latter are important as illustrations of a secondary interpretive theme.

The Bowie collection has very little relevance to the Monument story. If possible, it should be broken up and dispersed to appropriate National Park Service areas. If such action is not possible the collection should be returned to the Society of the War of 1812.

The Civil War ordnance should be removed when demolition of the Civil War earthworks is ready to start, and distributed among appropriate Service historical areas.

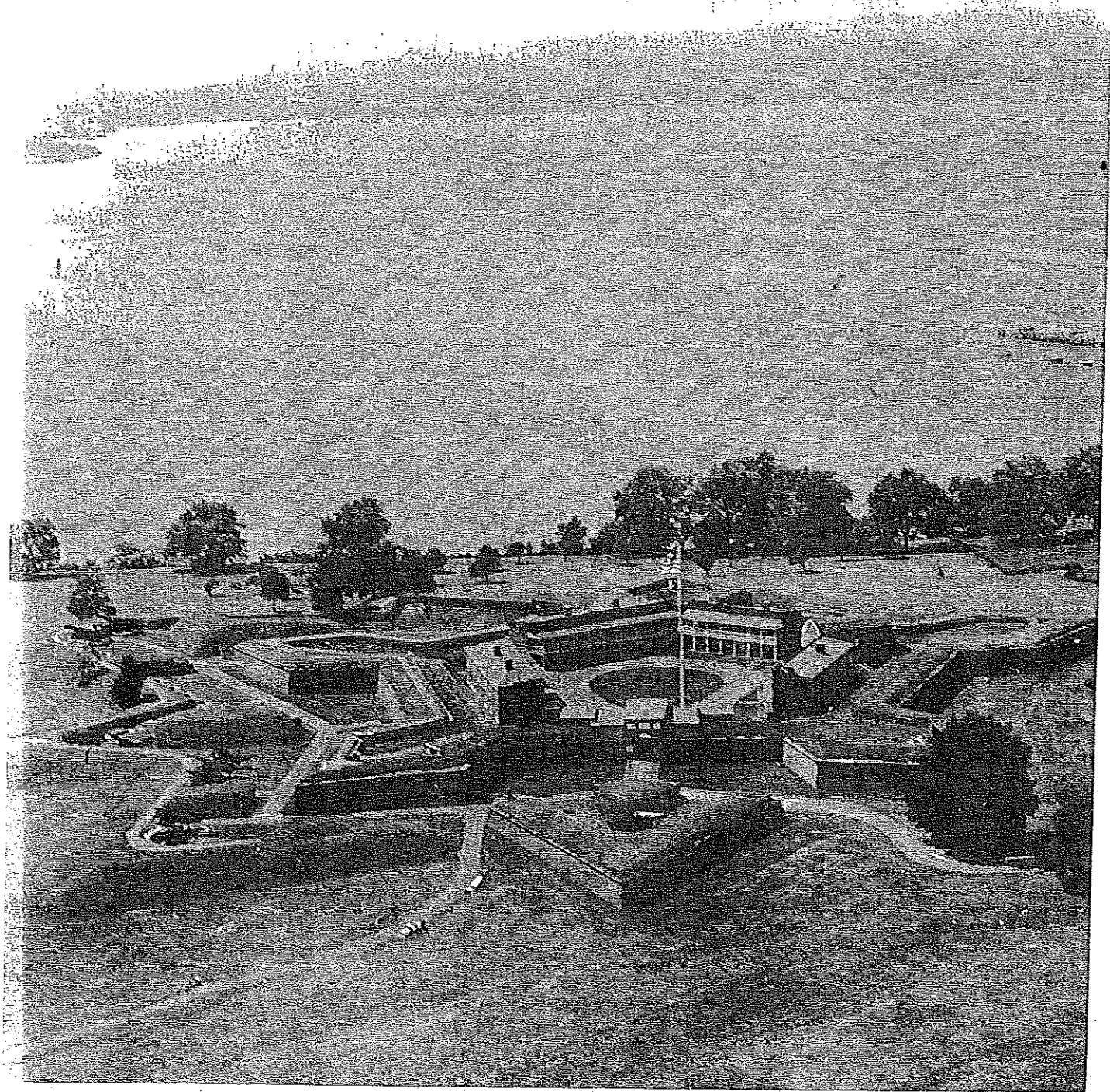
A limited number of carefully selected items should be exhibited to dramatize the central 1814 interpretive theme. Additional objects of exceptional value in illustrating other periods may be retained if they are specifically related to Fort McHenry.

Future acquisition should meet the criteria stated above for existing objects.

When the collection has been thoroughly screened and evaluated, excess objects should be distributed to other National Park Service areas, if appropriate, otherwise donated to outside agencies (see 3-A).

Historical Exhibitions

It is proposed that changing exhibitions of arts and crafts, related closely to the prime historical period of the War of 1812 or the Civil War be presented at the Civil War Magazine. Materials could be furnished by Baltimore art or historical groups or museums. In this way relations could be strengthened with these groups. Also, the exhibitions would help disperse use from the Star Fort and the Visitor Center.



U.S. ARMY
FORT MONROE
VA.

PRESERVATION AND IDENTIFICATION OF HISTORIC RESOURCES

1. General

The Star Fort, its buildings and outworks constitute the Monument's primary interpretive devices as well as its basic resources. They should therefore be placed and maintained in the proper condition to recreate vividly and accurately the period surroundings the bombardment of September 13 and 14.

Since no historic structures reports have been prepared, this section is intended primarily to furnish a broad guide to the general scope and extent of the project and to relate it to the interpretive programs.

It is neither possible nor necessary to return every detail of all historic elements to their original form or condition. Compromises must be accepted because of incomplete knowledge, and to avoid excessive delays. Generally, it is proposed to reproduce exposed features with historical accuracy but to construct concealed work with modern technics and materials. For example, wood flooring could be placed on a concrete slab instead of wood joists, thereby cutting costs and also protecting against both fire and dampness.

2. Previous Investigations

Extensive historical, archeological and architectural studies of the Star Fort and its outworks were made in 1958 and reported under the heading "Historical and Archeological Research Project - Fort McHenry" in November 1958. A separate study of the Star Fort and its buildings, prepared by Architect Lee H. Nelson for the Historic American Building Survey, was issued in January 1961. The Historic Base Map showing Fort McHenry in 1814 and included in this master plan (p.31) is taken from the H.A.B.S. report, which also includes detailed measured drawings of several individual structures.

Further archeological investigations were made after 1958 (see Resource Description, p. 28). All the above mentioned documents and supporting data are part of the H.A.R.P. collection at the Monument.

3. Further Research

Much additional architectural information is needed. Among other sources this should be sought through the Peale Museum and the Mayor's Commission on Historic and Architectural Preservation, Baltimore; studies of contemporary buildings in Baltimore generally; comparison with similar forts such as Fort Washington and Fort Mifflin. Also search of U.S. Army records, especially photographs, including World War I era or earlier, to obtain clues to the Fort's appearance prior to the extensive War Department restoration of the late 1920's. (This restoration was to the period of the 1830's--not the late-1814 period now being considered.)

Archeological excavations should be made in close coordination with the architectural investigations of specific structures. Privy sites should be located and investigated. Archeological explorations could also help in establishing the following:

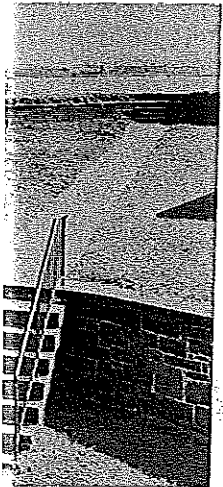
Location and construction of gun platforms
Cistern appearance
1814 parade level
Ravelin and sally port bridge construction
Depth and shape of dry moat (ditch)
Location and construction of upper battery

4. Star Fort and Interior Structures

The following procedures are proposed for restoration, rehabilitation and reconstruction. Numbers refer to structures on Historic Base Map--Fort McHenry in 1814 (p. 31). The datum period is December 1814, which will thus include the very significant post-bombardment changes to the Powder Magazine (3) and the Sally Port (6).

A. Outer Walls, Coping and Parapets

~~Although the Fort walls were originally 18 inches-24 inches lower than they are today, it is recommended that the present height be maintained.~~ *Corrected* Wood gun platforms should be reconstructed in the bastions.

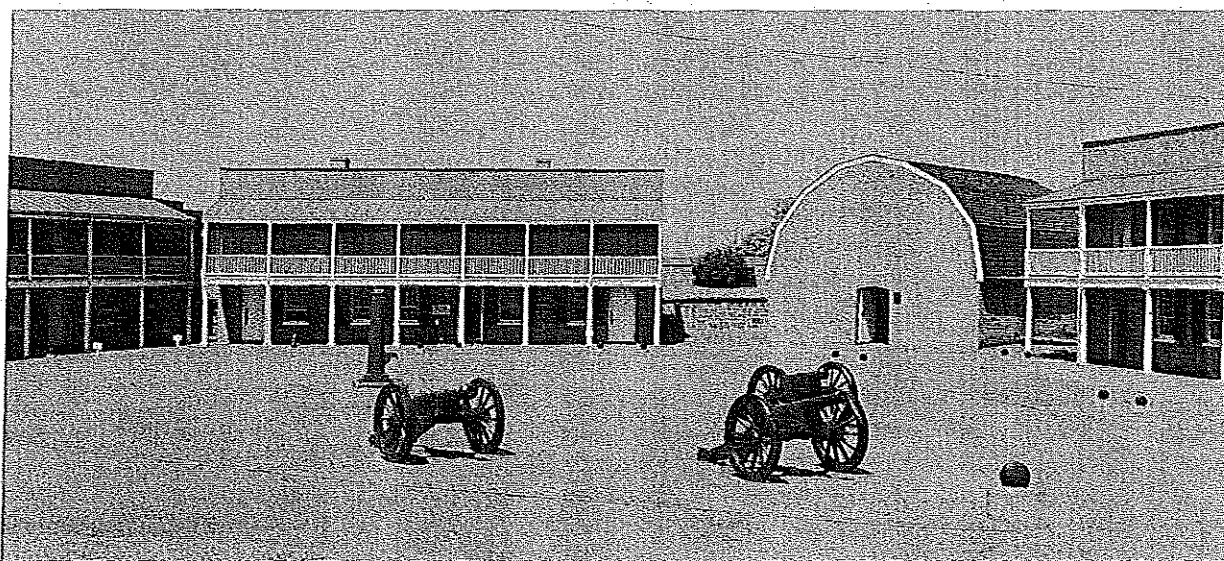


B. Revetment Walls and Terreplein

Present levels should be maintained. The masonry revetment walls between the parapet and terreplein and between the terreplein and parade level, though added after the historic period, are essential from a practical point of view. If removed the earth banks would soon be broken down by visitors. Trees should be reestablished on the terreplein to complete the historic scene.

C. Parade

The original parade was apparently lower than the present elevation. This historic level should be determined by investigation, and if the difference is only a few inches the parade should be restored at approximately the present level. If the difference is, say, 12 inches or more it would be desirable to restore the original level as this much difference would significantly affect the visual relation between buildings and the ground. Also, some adjustment of the final parade level may be necessary to make a transition from the Fort interior to the bridge between the Sally Port and the ravelin.



D. Quarters Buildings

These consist of the following:

Commanding Officer's Quarters and Office (Bldg. 2)

Officers Quarters (Bldg. 4)

No. 1 Soldiers' Barracks (Bldg. 5)

No. 2 Soldiers' Barracks (Bldg. 7)

All of these structures require drastic alterations to reestablish them historically. The first and second floor porches must be removed and the height reduced to one and a half stories with gable roof and dormer windows. Building 5 must be shortened and Building 2 converted to two separate buildings - Command Officer's Quarters and Guard House (see below).

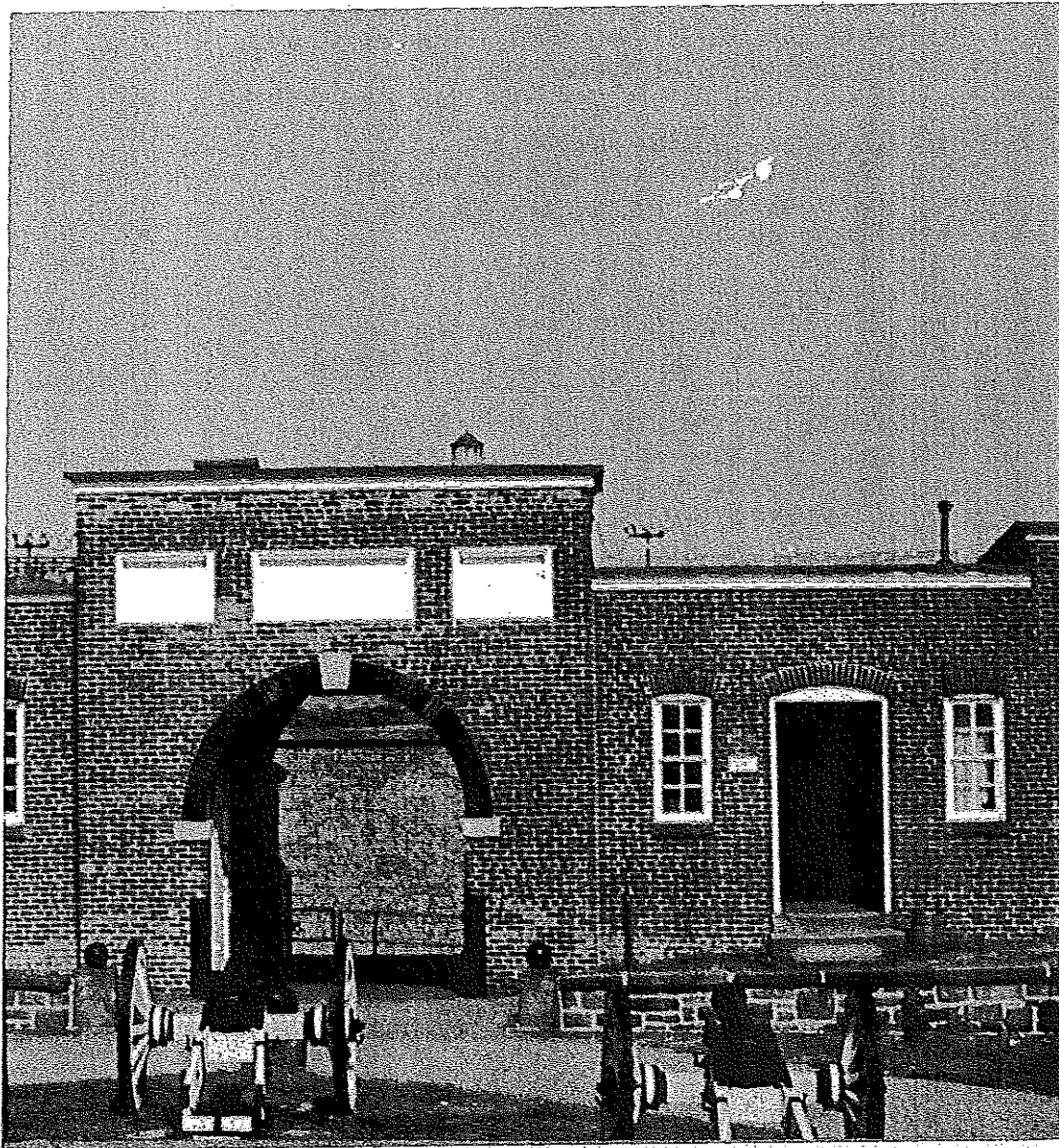
First floor door and window locations, with a few exceptions, are unchanged from the historic period. Stairs, and to a lesser extent, fireplaces will require alterations. Portions of some interior partitions must be removed or replaced by glass to permit viewing between rooms.

The cellar of the Commanding Officer's Quarters and Office (Bldg. 2) will receive exterior restoration and the interior will be used by the Monument staff as an operations center and will be closed to the public. The cellar of No. 1 ~~and~~ No. 2 Soldiers' Barracks (Bldg. 5 or 7) will be fully restored and open to the public as a kitchen exhibit. The other Barracks will be used for special children's programs.

Cellars of the Officer's Quarters (Bldg. 4) and either Building 5 or 7 will receive exterior restoration only.

E. Guard House

This structure (Bldg. 1) was originally a separate building, but was joined to the Commanding Officer's Quarters (Bldg. 2) some time between 1819 and 1829. When restored, this structure will be used as a headquarters for guides in period costumes.



F. Powder Magazine (Bldg. 3)

After the bombardment it was feared the British would soon attack again; therefore the walls of the magazine were greatly thickened and the top made secure by a heavy brick barrel vault or "bombproof." These improvements were completed by late September 1814. Orders for the improvements also called for a thick protective wall or traverse to be placed in front of the door; however, it is not certain that this was completed at the same time as the other work.

A wood superstructure and slate roofing for weather protection were added much later, apparently in the early winter of 1815.

It is recommended that the wood roof be removed, the brick vault be water-proofed and such additional restoration and rehabilitation as needed be accomplished to return the building to its late September 1814 appearance. It is also recommended that the traverse be reconstructed.

G. Sally Port (Bldg. 6)

This structure (brick barrel vault) and the casemates or "bombproofs" below on either side were built late in 1814 to provide, respectively, security for the Fort and protection for troops during bombardment. As in the case of the Powder Magazine, these improvements were made hurriedly in expectation of further British attacks.

The sally port was roofed in 1829; the casemates altered and guard rooms built in 1835; and the prison rooms added in 1857.

The alterations necessary to place the Fort in a state of combat readiness were accomplished soon after the battle, in the late fall of 1814. It is therefore recommended that the sally port and casemates be restored to the condition of that period, and all other structures removed.

H. Flag Pole and Flag

At the time of the bombardment the flag over Fort McHenry which inspired Francis Scott Key measured 42 feet by 30 feet in size. Since this flag is central to the historic meaning of the Monument it is strongly recommended that a flag of this size be displayed at all times, not merely on special occasions. Also, by presidential order the Service is required to fly a flag 24 hours a day.

The existing pole should be replaced, if necessary, by a specially reinforced structure designed to withstand wind action when the large flag is flown continuously. Also, a special flag will be required, specifically designed and fabricated to withstand violent wind action and continuous exposure. These measures are necessary to avoid the expense of constant replacement and the need for a large crew to raise and lower the flag at frequent intervals.

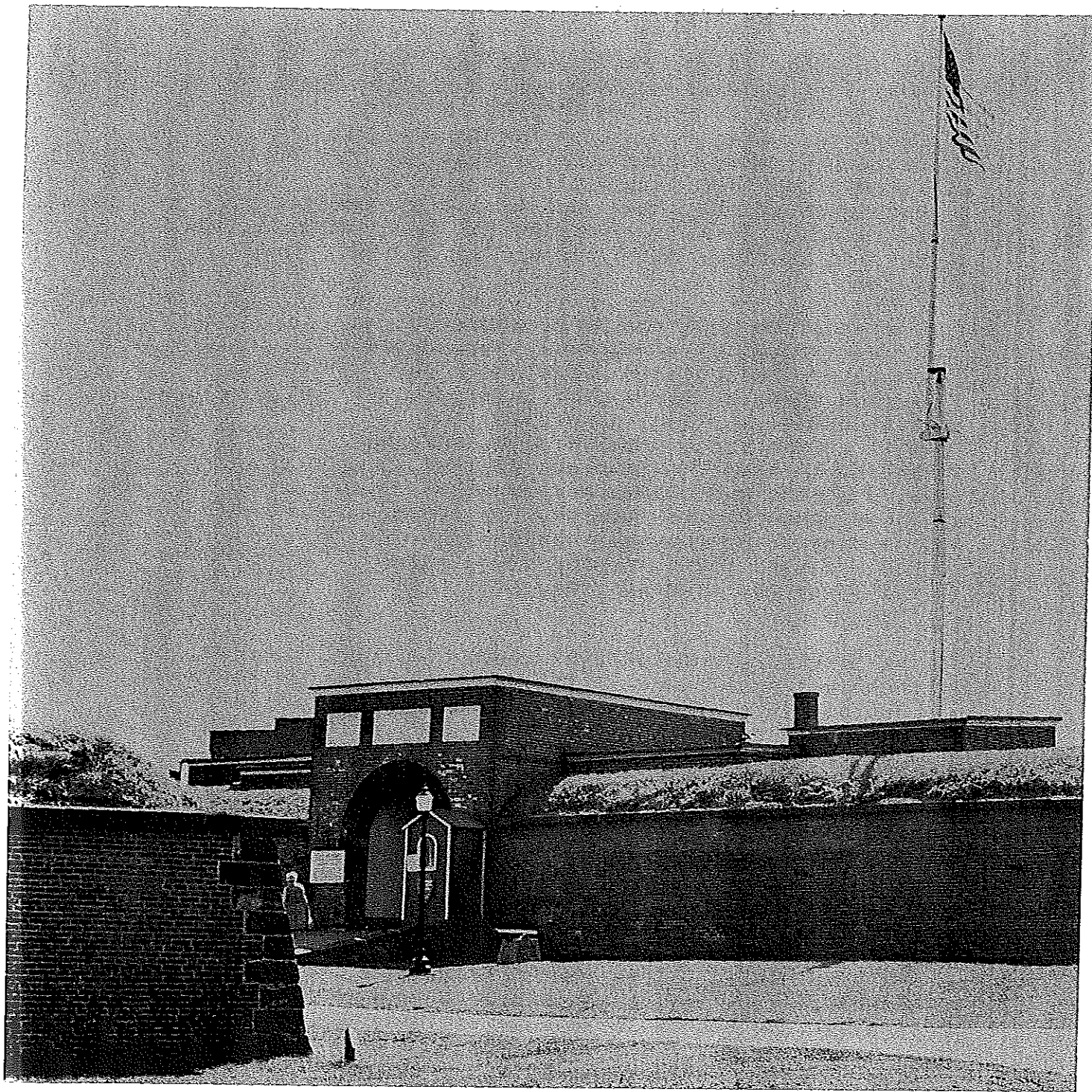
The Service should obtain expert technical assistance in this matter, possibly from other Federal agencies or private industry.

I. Cistern (Bldg. 8)

It is not certain whether there was a structure above ground over this facility in late 1814 or whether it consisted merely of an underground cavern and a pump. If sufficient data cannot be obtained to identify a structure the site should at least be marked. This should be done temporarily by moving the pump now inappropriately located in the middle of the parade.

J. General Note - Wood Flooring

The ground floors of the Fort buildings at present are made of brick apparently installed during the extensive alterations of 1829-39. This material should be removed and replaced by wood, the material existing in September 1814.



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5. Outworks

A. Dry Moat (Ditch) and Bridges

The construction of the bridges should include sufficient reinforcing to support vehicles so they may enter the Fort for service and repair operations. Restore moat to September 1814 condition.

B. Ravelin

Restore to condition at time of bombardment.

C. Upper Battery and Magazine

This installation was less important than the lower battery serving the 1814 bombardment. However, it is recommended for reconstruction since it is believed that there is a better likelihood of finding site data for it than for the lower battery.

6. Identification

The following historic features should be located and their extent and general configuration identified. The devices used should not be simply flat outlines but three-dimensional structures to help the visitor in visualizing the entire historic scene. They are not intended to be accurate or complete restorations. Materials might be stabilized earth, masonry, concrete, wood or a combination of these.

A. Lower battery and magazine (or shot furnace)

B. Earthen parapets and epaulement

C. Gun platforms

D. Barrack

E. Hospital

F. Tavern

The existing flat brick borders the sites of the gun shed and ble should be replaced by the res described above. Also, the historic road trace should be phatically defined (and the

beginning marked with gate post replicas), perhaps with light colored gravel. To provide continuity, this material could be incorporated in the proposed walks following the historic road location inside the boundary.

7. Mechanical Equipment

All buildings will require new lighting, heating and fire detection and suppression systems. Exposed elements should be inconspicuously located; however, they should be treated in a straight forward functional manner, with no attempt to disguise them as historical features.

8. Preservation

All existing masonry walls to be retained should be repaired, cleaned and repointed under expert supervision. Both existing and restored or reconstructed walls should be waterproofed to prevent deterioration and discoloration.

9. Scheduling and Coordination

In addition to the buildings' structural and mechanical work, new utility systems will be needed to link the various buildings to each other, to a central control station and to the Visitor Center building. Extensive site restoration, tree planting, and installation of flood lights and sprinkler systems are also required. To insure proper coordination of construction, facilitate staff performance, and permit maximum possible visitor use, a carefully detailed work schedule must be prepared. This schedule should cover both operations within the Star Fort and closely related work outside.

10. Civil War Powder Magazine

Although not of the central historic period of September-December 1814, it is recommended that this building be retained and operated as a secondary interpretive center of the Civil War period. This will also help disperse visitor concentration from the Visitor Center and Star Fort.

Rehabilitation and minor corrective changes only are proposed - not a complete restoration. New lighting, ventilating and heating systems should be installed.

11. Civil War Hospital

This building is located on the Corps of Engineers property which is proposed for acquisition and conversion to a parking area. Since the Powder Magazine will be retained for Civil War interpretation, it is recommended that the hospital be demolished along with the other buildings on the Corps of Engineers site.

12. Demolition of Civil War Earthworks

This operation should be carefully integrated with the archeological investigations. Also it should be scheduled in coordination with restoration inside the Star Fort (see Section 9).

The Civil War cannon, mounts, etc., should be distributed among appropriate National Park Service historical areas.



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MODERN FACILITIES

1. Architectural Theme

Future buildings, benches, signs, markers, etc., should have a restrained, impersonal, rather neutral character. All major elements should be as low and inconspicuous as possible. Details should be simple, limited, and color and texture subdued. In this way the focus of interest will be kept firmly on the historic resources rather than on modern developments.

The present visitor center admirably illustrates the desired character.

2. General

Recommendations for new or expanded facilities are based on the following assumptions:

- A. Visitors should have the best possible experience in the restored Star Fort. Quality will be related directly to limitation on number of visitors in the Fort at any given time.
- B. Control of numbers can be achieved in part by holding to present parking capacity.
- C. Restoration of historic buildings will limit capacity through decrease in total space.
- D. Fee payment at entrance will probably increase the number of visitors seriously interested in seeing the Fort (from approximately 25 percent to nearly 100 percent).
- E. Master plan seeks to encourage a larger percentage of long distance visitors who will want to stay in the Monument longer and see more.
- F. The strong possibility of improved bus service will mean more walk-in visitors.

3. Improved Entrance

This facility and the effect it will have on Monument use are analyzed in APPROPRIATE USE AND SETTING.

4. Parking Area

The Corps of Engineers property should be acquired and developed for parking, and the present overflow area restored. The entire parking area should be screened by planting to prevent distractions from the historic setting.* *(See Civil War Hospital, page 71).*"

5. Visitor Center

A. Public facilities

The lobby, exhibit space and auditorium should be enlarged to provide "holding" space to provide a control of visitor movement to the Star Fort. Also, increased space for interpretive activities will permit more thorough "pre-orientation" of visitors and thus enable them to complete the Fort tour more rapidly.

Additional space is needed to relieve the congestion around the concession counter. Also, toilet rooms must be enlarged, as the existing facilities in the Star Fort will be removed during restoration.

B. Management Facilities

More space is needed for staff offices, which at present are badly crowded. Provision also should be made for a conference room, library and work room for study collections and for storage. The problem will become acute when the library and work room in the Commanding Officers Quarters are no longer available due to restoration of that building. Storage space will be needed for this same reason.

It is estimated that the present structure should be doubled in size to accommodate the increased needs described above.

*The General Development Plan proposes screen planting along the historic boundary behind the gun house and stable sites, and continuing to the historic road trace. This planting is important to prevent visitor movement along the walk from distracting the view toward the Star Fort from the auditorium at the end of the audiovisual program.

6. Maintenance Building

Expanded by three bays to accommodate additional vehicles and also storage now provided for in the wooden shed, which should be demolished.

7. Employee Residences

Recommend two additional residences to provide for increased on-site protection. To lessen modern intrusion, these and the existing structures should be screened by planting to the extent possible consistent with surveillance requirements.

8. General Site Development

Re-establishment of historically appropriate trees as part of the Star Fort restoration is proposed in PRESERVATION AND IDENTIFICATION OF HISTORIC RESOURCES, Section 4-B.

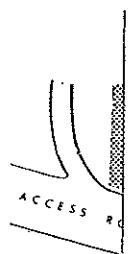
It is recommended that trees and shrubs growing in the Fort area in the historic period be re-introduced where possible both within the historic boundary and generally throughout the Monument grounds. This program will be necessarily modified and controlled by the rather poor soil conditions and by the needs for screen planting mentioned elsewhere.

An historic grounds report should be prepared as a guide, as well as a comprehensive grounds development plan.

STAFFING NEEDS

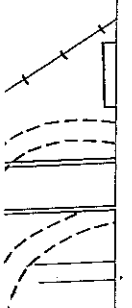
The following additional positions are needed to accomplish the Monument's mission effectively:

1. Protection specialist should also be able to function part in an interpretive capacity.
2. Maintenance man should have ability, with training, to eventually handle miscellaneous minor repair jobs. This will relieve the building repairman of such routine tasks.



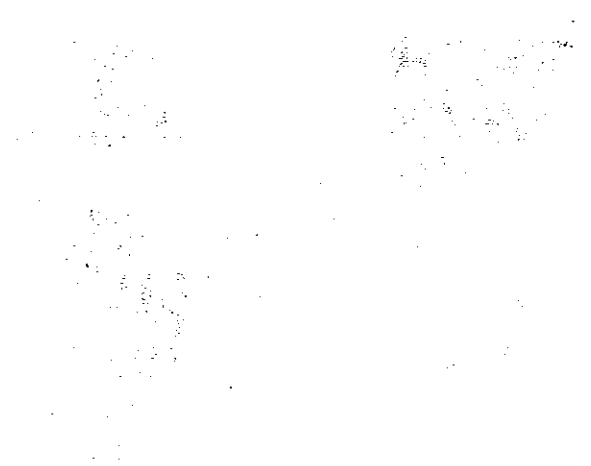
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DEVELOPMENT PRIORITIES

	1	2	3	4
1. <u>Access and Control</u>				
A. Construct Entrance Station and Turn-around	x			
B. Acquire Engineers' Property		x		
2. Remove Inappropriate Features				
A. Orpheus Statue	x			
B. Coast Guard Range Marker	x			
C. Markers on Buildings		x		
D. Bowie Gun Collection		x		
E. State Markers			x	
F. Fence and Walk- Washington Elm			x	
G. Storage Shed				x
3. Preserve Historic Resources				
A. Conduct architectural- archeological research	x			
B. Prepare Historic Structure Report	x			
C. Prepare Historic Grounds Report	x			
D. Reinforce Flag Pole	x			

	1	2	3	4
E. Restore to Late-1814 condition				
(1) Star Fort Powder Magazine	x			
(2) Bastions	x			
(3) Guard House		x		
(4) Quarters Buildings		x		
(5) Sally port and Casemates			x	
(6) Parade			x	
(7) Ravelin				x
F. Reconstruct				
(1) Traverse (Powder Magazine)	x			
(2) Upper Battery		x		
(3) Dry Moat			x	
(4) Bridges			x	
(5) Cistern			x	
G. Rehabilitate				
Civil War Powder Magazine	x			
H. Preserve Masonry Walls	x	x	x	x
(1) Repair and Repoint				
(2) Clean				
(3) Waterproof				

	1	2	3	4
I. Plant Trees in Star Fort				x
4. Information-Interpretation				
A. Interpretive Prospectus	x			
B. Prepare Furnishings Plan-Star Fort	x			
C. Install Special Reinforced Flag	x			
(42' x 30')				
D. Obtain Guide Uniforms		x		
E. Construct Markers - Outworks		x		
(1) Lower battery				
(2) Gun Platforms				
(3) Parapets				
(4) Barracks				
(5) Hospital				
F. Raise and Improve Existing Markers		x		
(1) Gun Shed				
(2) Stable				
(3) Tavern				
G. Prepare Sign and Exhibit Plan		x		
H. Improve Historic Road Trace			x	
Install Gate Post Markers			x	

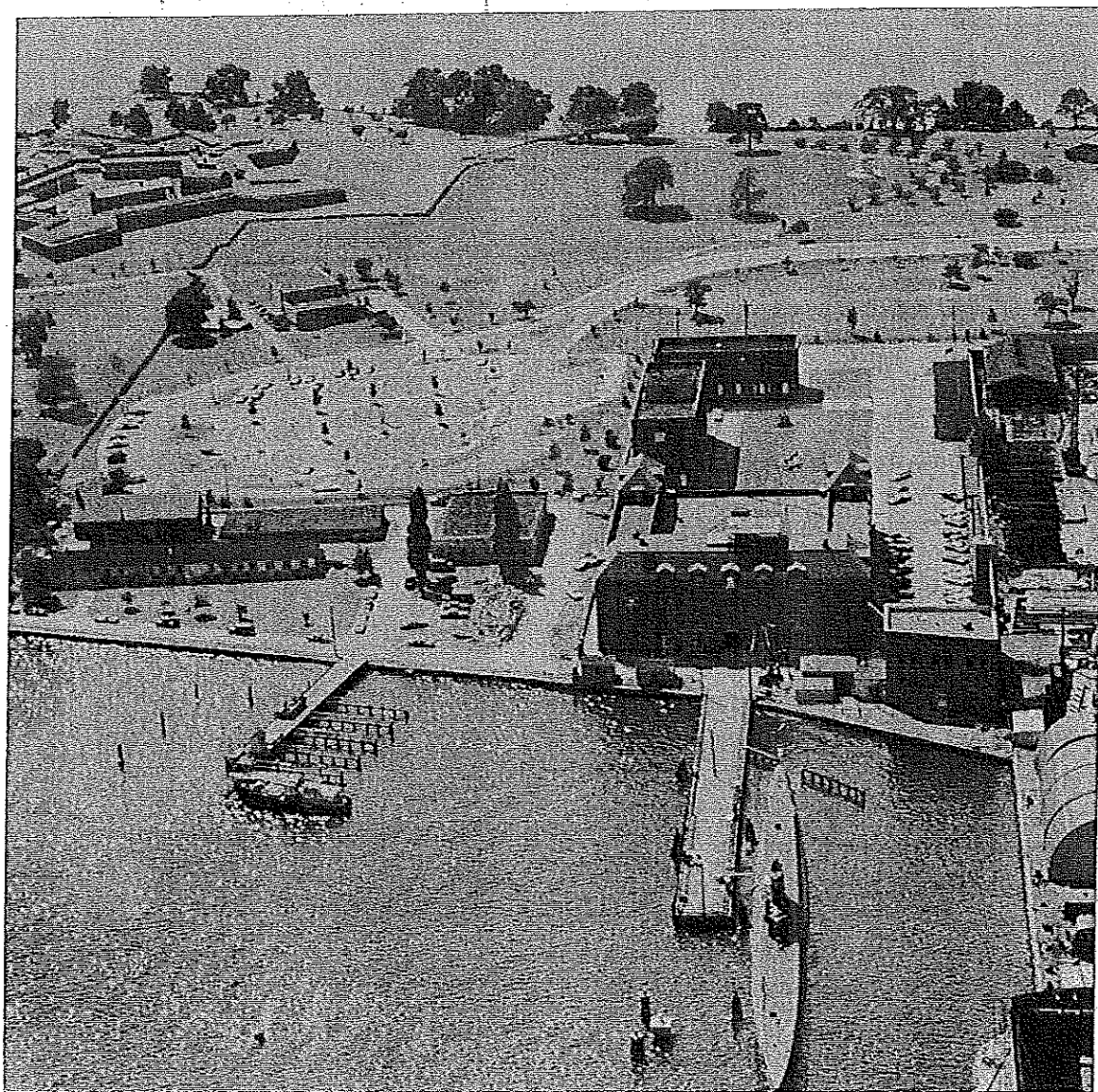
	1	2	3	4
I. Install Signs			x	
J. Acquire Furnishings			x	
K. Construct Interpretive Walk			x	
L. Lower Armistead Statue and Relocate				x
5. General Grounds Development				
A. Historic Grounds Report	x			
B. Comprehensive Planting Plan	x			
C. Remove Civil War Cannon		x		
D. Demolish Earthworks		x		
E. Obliterate Walks Near Fort		x		
F. Construct New Walks		x		
G. Establish Screen and Control Planting			x	
H. Restore Overflow Parking Site			x	
I. Develop Historic Planting				x
6. Develop Modern Facilities				
A. Build New Parking Area	x			
B. Install Lighting and Heating Systems - Civil War Magazine (see 3-F)		x		

	1	2	3	4
C. Enlarge Visitor Center		x		
D. Enlarge Maintenance Building			x	
E. Improve Utilities System			x	
F. Construct 2 Employees Houses				x

MECHANICAL AND ELECTRICAL WORK
Star Fort

The following work must be in general accomplished during the restoration or reconstruction of the Star Fort and its buildings. To the extent possible, however, the priority indicated is recommended for these specialized installations: (see 3-D, E.)

	1	2	3	4
A. Drainage System	x			
B. Fire Detection System	x			
C. Fire Suppression System	x			
D. Electrical System		x		
E. Heating System		x		
F. Sound System			x	
G. Communications to Visitor Center			x	
H. Flood lighting				x
I. Sprinkler System				x



ENVIRONMENTAL CONTROL

I. General

The previous sections of the plan outline specific proposals for improvement and development on Monument land or land proposed for acquisition in the near future. This section recommends various measures to eliminate or minimize the impact of inappropriate developments immediately outside the Monument boundary. (See General Development Plan, page 77.)

It will undoubtedly take years to accomplish the most effective measures of environmental control, and the full support and cooperation of the city of Baltimore will be necessary. To this end, the suggestions contained in this section have been thoroughly discussed with the Department of Planning of the Baltimore City Planning Commission. Also involved in this discussion were the Department's consultants, the architectural firm of Skidmore, Owings and Merrill. This firm heads an urban design concept team which is studying the potential freeway corridor system throughout Baltimore, including Whetstone Point. As part of their study, this team is seriously considering the long range possibility of converting much of the industrial land adjacent to Fort McHenry to residential use and open space. Also included in the study is an elevated freeway following McComas Street and terminating (a) in a tunnel under the Monument to Lazaretto Point, or (b) a bridge across the Patapsco River just northwest of the Monument.

Although these ideas have not been publicly announced, the Planning Department and the Skidmore representatives are interested in and sympathetic to the Service's objectives.

Item 2 below recommends the minimum action that should be taken to visually enhance the Monument. Item 3 recommends the long range action necessary to establish for Fort McHenry the most fitting possible environment.

2. Minimum Action

Views of the heavy industry (shipyards, cement silos, etc.) ringing the harbor surrounding Fort McHenry seriously compromise the Monument's historical quality. While these distant installations are beyond control, intrusive views of the U.S. Navy, Bethlehem Steel and Southern States Cooperative properties could be eliminated or mitigated by screen planting. (See photo, page 40.) Specifically, it is recommended that Lombardy poplars or a similar fast-growing tree be used, which would be appropriate since it is recommended that poplars be re-established in the Star Fort as part of the restoration program.

3. Long Range Solution

Whetstone Point, the peninsular on which Fort McHenry stands was open farmland in 1814. (See Historic Illustration, page ii.) In order to recapture this historical open appearance, dramatically emphasize and enlarge the monumental character of this famous site and enhance the Star Fort the following action is recommended:

Alternate A

Acquire the U.S. Navy property, clear the site and relocate all parking facilities to this site. Access would be via the road just north of the Monument residence area. Convert existing Monument entrance road to an historic trace. Acquisition of this site would be desirable in any case, since the high, bulky buildings there constitute a serious visual intrusion.

Alternate B

To increase the open, monumental character of the site even further, acquire both the Navy and the Bethlehem Steel properties. Clear all parking facilities and visitor center and relocate in Bethlehem site, obliterate Monument entrance road and establish historic trace. Consideration should be given to the possibility of a decked parking structure, perhaps in conjunction with a city parking authority. A picnic area should also be considered.

Alternate C

If neither Alternate A or Alternate B can be accomplished, the Service should consider one of the following actions, again in conjunction with the city of Baltimore:

1. Propose to owners the donation of the Bethlehem and Southern States properties to the city for park or recreation use. Service to share costs of development and maintenance.
2. Purchase by Service - lease back or sell back to city for park or recreation use.
3. Purchase by Service - lease or sell back to private developer for residential use.
4. Purchase by Service - lease or sell back to institution (education, research, etc.).
5. Rezoning agreement with city
6. Donation of scenic easement by future owners ensuring compatible use.

It is recognized that other methods to the desired environmental improvement may now exist or may become available in the future.

NOTE: If a suitable land use change becomes a reality, the Baltimore Planning Department would like very much to see established a privately operated restaurant serving the general public. Since Monument visitors would benefit, the Service should support such a proposal.

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APPENDIX

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FACTORS AFFECTING RESOURCES AND THEIR USE

Legal Factors

Fort McHenry National Monument was established by an Act of Congress approved March 3, 1925 (43 Stat. 1109). This Act authorized and directed the Secretary of War to restore Fort McHenry "to such a condition as would make it suitable for preservation permanently as a national park and perpetual national memorial shrine as the birthplace of the immortal Star-Spangled Banner. . ."

The Act provided that the Secretary, in case of a national emergency, use the area for military purposes.

Effective August 10, 1933, Fort McHenry was transferred to the National Park Service by Executive Order 6166 and 6228 of June 10 and July 28, 1933. The Federal Government retained exclusive jurisdiction. By Congressional Act of August 11, 1939, the park was redesignated Fort McHenry National Monument and Historic Shrine.

An Act approved June 31, 1947 (61 Stat. 212) authorized and directed the Secretary of Interior to grant an easement for two water lines to the City of Baltimore. By agreement the U.S. Coast Guard operates and maintains a navigational beacon light on the Monument.

Congress has placed no ceiling on costs of development.

Land Status

Federal - National Park Service - 43.26 acres.

Climate

Fort McHenry lies in a region approximately midway between the vigorous climates of the North and the milder environs of the South. The Atlantic Ocean on the east and the Appalachian Mountains to the west provide further modifying influences for the area. Temperatures average from a winter low of 32 degrees to 75 degrees in the summer. Humidity is usually extremely high. Rainfall is distributed fairly evenly throughout the year with the cumulative total being 40-45 inches. Snowfall occurs on about 25 days but only a third produce more than one inch. Freezing rain or sleet will also be experienced periodically during the winter.

Two conditions that must be considered in the management of the area are wind and smog. Throughout the year wind speed will average 10 miles per hour, but on rare occasions will reach hurricane force (see flag). Because of its location in an industrialized area, Fort McHenry will experience smog conditions frequently. Although Baltimore has an active pollution control committee the solution of the problem will be years in coming.

Soils

Throughout Fort McHenry's years as an active military post, many excavations and fills have taken place to change the characteristics of the soil. Beneath the topsoil one may find almost anything from clay to construction rubble. Ground water level varies, but in some locations is close to the surface. Because of generally poor drainage, archeology and construction can be difficult. Establishment of trees and plants is severely limited by the poor quality of the soil.

RESOURCE USE

Activities	Participants 1961	Participants 1966	% of Increase
1. Park Travel	468,184	696,202	48
2. Source of Travel			
A. Private Vehicles	397,363	507,563	27
B. Organized Groups	24,053	119,019	395
C. Walk-in	46,818	69,620	49
3. Use of Area			
A. Drive Through	234,092	234,671	4
B. Stop-in Park	234,092	425,531	93
1. Visitor Facilities			
a. Visitor Center	none	350,680	
b. Star Fort	88,401	203,993	130
2. Tour Grounds	117,046	226,265	93
3. Others	75,000	100,315	33
4. Public Contacts			
A. Attended Stations	88,401	671,509	660
B. Trips, Talks, Roving	25,108	671,509	316
C. Self-Guided	none	268,308	
D. Audiovisual	none	438,922	

FORT McHENRY VISITATION	
1966	696,200 (Actual)
67	567,700 (Actual)
68	666,600
69	715,100
70	763,600
71	812,100
72	860,000
73	909,100
74	967,600
75	1,006,600
76	1,054,600

